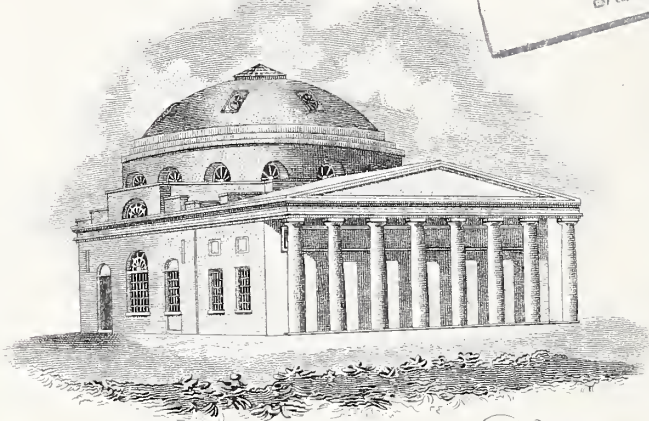




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# THE JOURNAL

of the

## INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA



Issued Monthly  
Under the Direction of the Council



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## ORIGINAL ARTICLES

### BRAIN TUMORS\*

ERNEST SACHS, M. D.  
ST. LOUIS

One of the statements that one hears most frequently on the subject of brain tumors is that the cases usually die. Another statement is that the surgeon operated, but did not find the tumor. In the past year, 1932, we did 249 craniotomies, with a mortality of 12.8 per cent, and our mortality included every case that died in the hospital, no matter how long it had been there after the operation. In these 249 cases the lesion was not found in 8 per cent of the cases. In other words, it was found in 92 per cent of the cases, and these figures, I think, are fairly representative of what is going on in most neuro-surgical clinics in this country.

I realize fully that these results must be better and we hope they will continue to improve, but why are we getting results of this sort today, and why have they improved so materially in spite of the fact that the general opinion among the profession still is that that is not the case?

The improvement is first due to the study of the cases themselves. I have for the last ten or twelve years had in my group young men who are being trained to take up neuro-surgery, consequently they are looking on the subject in a very different way than the average interne or house officer who merely takes it as a part of his regular training. They are definitely interested and trying to gain every possible advantage from these cases they are studying. Therefore they have improved their technique of taking histories, and today we are getting information from our patients that frequently in the past we missed. I will not take time to go into great detail in the matter of histories, but I should like to point out a few things which we lay great emphasis upon in taking histories and which we find of enormous value in helping us to localize the lesion.

In the first place, great emphasis is laid upon the sequence of symptoms, the order in which the

patient's symptoms develop, because frequently the initial symptoms may give a clue which otherwise might be entirely missed. Two specific examples illustrated this very well.

A farmer was brought into the hospital with the typical picture of brain tumor—choked disc, hemiparesis, and convulsions. There was no question what he had, but the question came up where the lesion was located. From his examination and history at the time of admission we would have at once concluded, and very properly, that we were dealing with a lesion in his left motor area because he had most marked paralysis of the right arm and hand. In going into his history we obtained this interesting information: for about fifteen years he had had a peculiarity which his wife thought was just an idiosyncrasy; he would be sitting in a room with the windows closed and suddenly would hear bells ringing. It was always the same bells; there was no other subjective sensation of sound; it was always the ringing of bells. This symptom repeated itself over and over again, week after week, for over fifteen years, and finally, at the end of fifteen years these other things developed—trouble with the eyes, headache and vomiting, and other characteristic symptoms of brain tumor that everyone is or should be familiar with. The fact that he had this subjective sensation of hearing so many years before his other symptoms developed was a clear indication that he had a tumor which had started, not in the motor area, but in his auditory center which is located behind the mastoid and just a little above it. Consequently at operation we made the center of our attack back there and not up in the motor area. It was found the patient had a localized tuberculous process, a tuberculoma; following operation his choked discs subsided and for years afterward he had no more subjective sensation of hearing. The localizing sign was developed entirely in the history, the subjective sensation of sound. This proved of greater value than the examination. The history determined where this lesion was located.

Another example which we had in the past year was that of a young woman, a school teacher, who had beginning symptoms of a tumor—headache, and very slight eyeground changes. She gave this very interesting history: she had noticed for a number of months that while she walked to school along a country road she would suddenly forget where she was and who she was, and would imagine herself

\* Presented before the general scientific meeting of the Indiana State Medical Association at French Lick, September 27, 1933.

a member of a medieval pageant. This pageant she was able to describe in considerable detail. She knew perfectly well that this was only imagination, but it occurred over and over again. She had no other symptoms, no headache or vomiting, but this visual disturbance was so vivid that she was able to describe it to her sister who was walking with her at the time. The sister stated that while she had this experience she (the sister) could not detect any abnormality. This symptom is a very striking one and is described by Hughlings Jackson as a "dreamy state." These attacks may assume peculiar forms, not always the same; sometimes the patients say peculiar things or sees strange sights. The attacks this patient described were very graphic and striking and arose from irritation of the temporal lobe. This girl at operation was found to have an angiomatous mass at the tip of the right temporal lobe, which we removed with electro-coagulation, with comparatively little difficulty. It was interesting in this particular case that the patient, although she had a lesion of the temporal lobe, did not have the other symptom and sign, field defect, which very frequently accompanies temporal lobe lesions.

In temporal lobe lesions, especially of the right lobe, one of the most valuable methods of examination we have is careful examination of the eye fields, and we have found after years that, without saying anything disparaging of my ophthalmological colleagues, it is absolutely essential, in order to develop a small field defect, to have the field examination made by one of my own assistants who has ample time to sit down for an hour, or two hours, and develop the field defect. Sometimes such a defect occurs only for color. In the past year we have had two pituitary tumor cases whose object field was perfectly normal, but in whose color field we detected beginning bi-temporal hemianopsia, which is characteristic of pituitary disease although it does not always occur.

A careful analysis of the symptoms, especially the subjective symptoms, that patients with brain tumor complain of, is of enormous importance in the history, and is one of the things we depend on tremendously as an aid in localizing a lesion which otherwise might be readily missed.

In the matter of physical findings, aside from very careful examination of the nervous system, reflexes, sensation, motor power, the thing that we depend upon most of all is examination of the eye fields because both temporal lobes, particularly the right, may give you a clue that you could not get in any other way. A very good example occurred this past week. A patient had a picture of brain tumor with headache, moderate degree of choked disc, and on neurological examination he showed a pathological toe sign on the right side, but his x-ray picture showed a marked change in the frontal bone on the left side. The bone appeared moth-eaten, there seemed to be a distinct deposit of new bone on the inner table, and our x-ray man expressed the

opinion that there was a tumor in the left frontal lobe, based on the x-ray findings. On physical examination this patient had a complete right homonymous hemianopsia passing right through the central point, and the history showed that he had had occasional attacks characterized by flashes of light appearing on the blind side. We concluded that in spite of the x-ray findings it was impossible to have that sort of field defect from a frontal lobe lesion and that it would be wiser to disregard the x-ray findings and be guided entirely by the right homonymous hemianopsia which indicated a lesion of the left occipital lobe. But the one question we could not quite decide was whether this lesion was in the occipital lobe or was pressing on the occipital lobe, and for that reason we decided it would be better in order to plan the operation properly first to make ventriculograms, which we use today frequently not in order to determine on which side the lesion is located, because you can often do that by physical examination and history, but to determine how best to approach the tumor. As we knew the lesion was on the left side we made a small perforated opening over the left occipital lobe, but when we introduced the needle we felt the tumor, therefore we at once turned down a flap over the occipital and temporal lobes on the left side, and found a meningioma growing from the superior surface of the tentorium cerebelli. We had to resect a considerable portion of the occipital lobe to remove the tumor. Since the patient could not see on the right side anyway, we felt it was legitimate to sacrifice that portion of the brain. In this way it was possible to expose the tumor on the superior surface of the tentorium cerebelli and remove the entire tumor. I might add that in the removal of the tumor we used all the tricks that we have or know of to get the lesion out. The patient was 60 years old and had a fairly high blood pressure so that he was not a very good operative risk, and therefore we did not, as we have been doing for the last three or four years, use avertin per rectum, but decided that the lowering of the blood pressure, which you do see sometimes with avertin might be harmful, so we went back to the method we used fifteen years ago and operated this man under straight local anaesthesia. I think the result justified that decision. After we turned down the flap and exposed the occipital lobe we could see the edge of the tumor and then made use of what has come to be an invaluable method in cerebral surgery, electro-surgery. By means of electro-coagulation and the electric knife it was possible in a brief time to coagulate the large veins all around the longitudinal sinus and also those running into the lateral sinus, because the tumor received its blood supply from both of these sources, and then excised with the electric knife a large portion of the occipital and temporal lobes, so that we could get right down to the tumor. That may sound like a radical procedure, but to retract the brain sufficiently to get a good portion of this particular



tumor naturally would traumatize the brain to such an extent that that portion would have had no function anyway. Traumatized brain does not heal very well, and it has been our experience that it is better to excise the brain rather than retract it considerably, if it is in a region that will not interfere with the patient's function too much, better to excise it with an electric knife than to retract it too violently. For example, with eighth nerve tumors, which are so difficult to expose, it is always far better to excise a portion of the lateral lobe of the cerebellum than to retract that portion of the cerebellum. One can do the exposure with less trauma if that portion be excised rather than retracted.

Another method of examination with which you are all familiar, and which is often of enormous value, is the x-ray. I am frequently asked, and have plates sent to me to pass upon, to decide whether or not a tumor shadow is present. Comparatively few tumors throw a shadow; not more than 8 per cent. It takes an extremely good x-ray picture to show a fine line of calcification. What one usually sees is convolutional atrophy which is generally a sign of pressure. Occasionally we may see a large mass of calcification, and occasionally one may get a great deal of information if one takes the special position described by Naffziger of the University of California who demonstrated the pineal shift. Normally, the pineal gland lies in the median line, but occasionally it is pushed to the side opposite a tumor across the median line, and that is a valuable sign if one is able to demonstrate it.

Lastly, there are a number of cases in which it is impossible to arrive at a diagnosis without ventriculograms. We do not use air injections unless we are unable to arrive at a diagnosis in any other way, but we do not hesitate to make use of them if we must, realizing, however, that it is not an infallible method and that even under the most careful technique it is accompanied by some risk and danger. What we are doing now is to make our perforator opening, usually over the occipital lobe, a day or two before operation, and then just before taking the patient to the x-ray room introduce a needle through one or both occipital lobes, see the air plates immediately and if we can arrive at a diagnosis go on and do the operation indicated at the same sitting. We do not believe in doing air injection on one day and then waiting several days before carrying out the operation. That increases the risk materially. I am also thoroughly opposed to using encephalograms on patients who have tumors where there is choked disc. In the first place, encephalograms are extremely painful, the patient has intense headache, often becomes pale and breaks out in cold sweat, and occasionally has even more alarming symptoms. In my experience a ventriculogram is less dangerous, less uncomfortable for the patient, and gives you a much more satisfactory picture.

#### DISCUSSION

E. VERNON HAHN, M. D. (Indianapolis): It would be helpful, I think, if we admitted that in Indiana we have not been able, so far, to put brain surgery upon the efficient scientific basis which prevails in St. Louis. The reasons are numerous. Aside from the question of personal skill there is the prerequisite of clinical facilities and organization. Sponsorship of brain surgery has been lacking from quarters where it might have been expected. Until a properly organized brain surgery clinic is set up and given adequate encouragement we will have to content ourselves with results which compare none too favorably with what is being done in the great medical centers. In my opinion, Dr. Sachs' greatest service, in giving us this discussion, is in calling attention to the paramount importance of clinic organization in this most exacting surgical specialty.

J. R. PUGH, M. D. (Hammond): I would like to ask this question: In the coagulation treatment described, as well as in the use of the electric knife, there is undoubtedly always some sloughing of tissue—do you allow for drainage in those cases, or is there any difficulty at all from the absorption of such devitalized tissues, particularly in this location? We know about it elsewhere, but is it the same in the brain?

M. CASPER, M. D. (Louisville, Kentucky): Avertin anesthesia requires long experience. How much per kilogram of body weight is given? More than for an ordinary major operation which may last an hour or an hour and a half?

ERNEST SACHS, M. D., (closing): Regarding the question about possible sloughing following electro-surgery, that question has come up on a number of occasions, and some men have been averse to using electro-surgery in the brain because they feared that might happen. The vessels that are coagulated do not slough. I have in my laboratory sections of a blood vessel that I coagulated in a patient with an angioma that has not shown any necrosis. The operation was done in two stages. After the first stage I removed some of the coagulated vessel and had it sectioned in the laboratory. I have shown these sections to a number of people, and from the appearance you cannot tell whether it is a living or dead vessel. There is a minute clot in the center, but no evidence of necrosis. If you incise the brain tissue I think probably you do get a little necrosis, but no more than when you tie the vessel and get a slough beyond the vessel. I do not feel there is any necessity for using drainage, and so far as I know it has not been attempted.

About avertin anesthesia, we are using smaller and smaller doses. We get our best results by using 80 or 90 milligrams per kilo of body weight. We always combine it with local anaesthesia. We give the patient avertin and then surround the



operative field with local anaesthetic. It will not do just to give avertin and nothing else, but we do not find we need to use any more avertin because it is a brain case, although it is a long operation, usually lasting for a number of hours. Patients will remain asleep five hours with avertin, and if you add local anaesthesia they will go through without any trouble, and there is no need of giving a large dose of avertin. The only time we have ever had any trouble with avertin has been in very fat people. Patients who weigh over 180 pounds cannot stand as much avertin per kilo of body weight as the patients who weigh less, and in these we give a smaller dose. If you have a fat patient, cut the avertin down below 80.

## THE DIAGNOSIS OF MAXILLARY SINUSITIS BY THE USE OF OPAQUE OILS\*

RAYMOND C. BEELER, M. D.  
JAMES N. COLLINS, M. D.  
INDIANAPOLIS

In September, 1930, we presented our first paper on this subject before the American Roentgen Ray Society at West Baden, Indiana.<sup>1</sup> The work was rather new and only a few cases were reported. Since that time we have been called upon to examine many more patients and we are still of the same opinion, that the opaque oil clears up many questionable cases.

It is only in the past eight years that opaque materials in sinus visualization have come into common use. There are still some roentgenologists who believe that they can show on the routine sinus films all of the pathology present without using this method of injecting the opaque medias. We have not found this always to be the case and in some instances have shown much more or less pathology than the original maxillary projection gave us. Some of the otolaryngologists in our city have used the method in many of their cases to determine the future treatment. These same men who used the oils three years ago have continued with these injections and in the majority of their cases have found the oil to give them the desired knowledge of the actual existing pathology.

Our interest in the use of opaque media for diagnosis in maxillary sinus disease dates back to April, 1925, when we were called upon to make roentgenograms of a case suspected of having polypi. The primary film showed suspicious shadows in the base of the right antrum. An injection of 4 c.c. of 20 per cent aqueous solution of neosilvol was made through the normal opening into this antrum. Van Osdol<sup>2</sup> has reported the result of this and several other cases upon which the same investigations

were made. He found the method particularly helpful in antral cases where the findings were not definite.

The injections, in the cases seen by us, have been done in the offices of otolaryngologists, many of which are a considerable distance away. Once the antrum is well filled, there has been no trouble in its retaining the injection, with the exception of a few cases where window operations had been done. In these it has been found advisable to plug the windows with a small piece of cotton.

After following a number of cases for several days, we concluded that no valuable information was to be obtained from visualizing the sinus drainage. Many of our follow-up films show a retention of a large part of the medium for four or five days. Any difference in emptying time is probably explained by the difference in technic or materials used.

There has been some controversy as to whether or not the antrum should be washed out before the oil is injected. Since the oil is insoluble in water, it is obvious that the antrum should be dry if we are to obtain a true outline. Our best results have been obtained when the injection was done before or several days after washing.

There is undoubtedly a change in the mucous membrane after the oil has remained a few days, but this does not cause any alarm. A few cases have had symptoms similar to those in acute coryza. We have not seen any complications of importance after the oil injection. In fact, many of our patients report considerable relief for several days afterward.

It has long been known that the maxillary sinus can change its appearance, as seen on the roentgenograms, within a few hours. This may be due to allergic reaction or to an infection. We have seen one case where only a small amount of oil could be injected into the sinus, followed by a later injection which completely filled a normal antrum. Jones<sup>3</sup> and Proetz<sup>4</sup> refer to this and warn against radical measures before conservative treatment followed by check injections. We have been unable to find other mention of this in the literature. Proetz<sup>4</sup> has recently described three cases in which the injected antra were normal but in which the films four or five days afterward showed a definite thickening in the mucosa, which exuded most of the oil. Since these reactions occurred in known allergic individuals, he believed them to be the result of an allergy. This reaction has been present in about 20 per cent of his cases. We have taken films on many of our cases four or five days after injection and in almost every case this reaction has been present. It does not seem likely that an allergy would explain the reaction when present so often. It may be that the oil is extruded from the antrum by this means.

In order to obtain the greatest amount of information from the examination, the antrum should be well filled. We have not attempted to have the

\* Presented before the Section on Ophthalmology and Otolaryngology at the French Lick session of the Indiana State Medical Association. September 27, 1933.

injected oil measured as the size of the sinus can be judged from the films. The amount of oil retained by the normal sinus varies from 6 to 12 c.c. We have not found that making a number of films in different positions is necessary. In the well filled antrum an erect posterior-anterior and lateral film is usually all that is needed. We have been using an erect posterior-anterior position in which the horizontal central ray passes along the floor of the antrum. We have found this to be the most helpful of all posterior-anterior exposures. In the partially filled antrum it is often found necessary to use several positions in order to visualize all the pathology. We insist on primary films and also insist that only one antrum be injected at a time. With both injected, the value of the lateral view is for the most part lost.

There are, at the present time, a number of satisfactory preparations on the market. The greater part of our experience has been with lipiodol, diluted 33½ per cent in olive oil. The result with brominol and campidol have also been good. Glaser, Futch and Snure<sup>5</sup> have used the latter altogether and with excellent results. Those interested in the chemical and pharmacological tests of halogenated oils are referred to the works of Tabern, Hansen, Volwiler and Crandall.<sup>6</sup>

Fraser<sup>7</sup>, after a study of 35 injected antra, concluded: (1) that one may demonstrate that an antrum is without abnormality; (2) that in acute inflammation one may throw light on the pathological process; (3) that in more advanced cases one may obtain indications for surgical treatment, i. e. continuation of irrigation; (4) that in chronic hyperplastic cases one may show what must be accomplished at operations; (5) that invasion of the sinus by dental cysts and other pathological processes may be diagnosed. Fraser's forecast has been amply verified.

The normal antrum, when injected, will show a thin line of separation, not more than 1 mm. between the oil and sinus wall. At the base one may find variation in the oil outline, due to projection of the tooth roots, but the curves will be smooth and correspond to their outline, unless there is disease. Polypi will produce a smooth localized defect in the filled antrum and their exact size and location can be determined by proper projections. Cysts and mucocles give somewhat the same defect, are usually larger and more circumscribed. Hyperplastic changes produce an irregular outline, varying from slight changes to those where only a few drops of oil are retained near the central portion of the antrum. Despite these pathological changes a great many of these cases return clear washings.

#### CONCLUSIONS

1. The use of opaque oil enables one to visualize the actual pathology present in the maxillary antrum.

2. It determines better than any other means the type of treatment to be instituted.

3. The oil can be injected without harmful effects.

4. Injection is indicated in those cases where the primary plate is inconclusive.

5. There is usually a reaction of the mucous membrane, lasting until the oil has been extruded.

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#### DISCUSSION

W. E. STEWART, M. D., Terre Haute: This subject is one of great importance to the rhinologist. The value of oil injection, brought out by this paper and excellent films, leaves no doubt that it is a great help in making a diagnosis. Our work is to select the class of cases suitable for oil injections to determine our course of procedure. The old saying still holds, "Haste makes waste," and often leads us into trouble. A good history is always necessary in making a diagnosis, whether it is acute, sub-acute or chronic. Another very interesting puzzle that the able profession has thrust upon us in recent years is the subject of allergy. Quoting Proetz, "This subject at present occupies the focus of much capable scrutiny." I fully agree with Dr. Proetz. If we make the proper diagnosis, the radiologist will aid in determining the course of treatment to pursue. In the first group, acute cases, drainage is the essential thing. X-ray is of no particular value. A history of a discharge from the nose, on the affected side, following a recent cold or influenza, and headache with tenderness on pressure, will reveal with transillumination a dark area over the molar eminence and beneath the orbit, and the diagnosis of empyema may be considered sufficiently positive to warrant an exploratory puncture. A few irrigations may be necessary. I am not in favor of prolonged antrum irrigations. If it enters into the sub-acute stage, then thorough drainage is indicated, preferably a large antrum window beneath the inferior turbinate, for the greater amount of pathology then is on the floor of the antrum. Many cases will respond readily to this treatment, occasionally they will not respond to any of the



above treatments and consequently we have the third or chronic stage and that is where the oil injection is most beneficial in helping the rhinologist decide whether to continue treatment or resort to surgery. Another class, very rare, is suspected tumor; it may almost or completely fill the antrum cavity. In my limited experience with the oil injections, I came across just such a case, when only 4 c.c. were injected, the patient complained of severe pain, the needle was withdrawn and radiogram revealed a large tumor, almost completely filling the antrum. Another method of introducing the oils into the maxillary sinuses should be mentioned, the "Proetz displacement method." He has been successful in many cases in filling the antrums sufficiently to get a complete description of the pathology present. I am not thoroughly convinced, in my own mind, that there is not an element of danger connected with using a small needle either in injecting oil or washing the antrums. As to the oils in use, various ones are on the market, bromodized lard oils and so-called vegetable oils. Lards oils in addition to throwing down flocculent precipitate had a tendency to rancidity. Among the vegetable oils, olive oil was found to possess many advantages. Bromodized olive oil may be heated to 120 degrees for several hours without appreciable decomposition. Lipiodol is another good oil; it is stable, slightly altered in color under the influence of light, so it is well to keep it in a dark place. Rhinologists, as well as radiologists, are proud of this forward step, but my humble opinion is, oils whether they be lipiodol, brominol, iodipin, or bromipin have their greatest value in helping make a diagnosis in cases of chronic sinusitis and suspected tumor in the antrum.

JOHN W. CARMACK, M. D. (Indianapolis): This is a very valuable method in diagnosis, particularly in differentiation of the type of trouble that is present in the mucous membrane. I do not believe that any of us are using oil injections in as many cases as when we started. We have learned better, and particularly with the aid of better x-ray service, fewer cases need lipiodol injection for further proof of trouble. We are indebted to one of our own members, Dr. Harry Van Osdol, for pioneer work in this field. I believe that this is a method which has come to stay, regardless of the fact that some of our prominent x-ray men in this country claim little or no value for it.

There are two or three points which I would like to emphasize. One is the question of whether or not there shall be antral washing previous to instillation of oil. Dr. Collins stated that he feels that it is better *not* to use irrigation. I have used it both ways, and feel that irrigation immediately before the oil injection, if the picture is to be taken at once, is not harmful. My reasons for this are that washing the antrum is of definite diagnostic import to me. You can determine whether or not there is obstruction to the ostium of the sinuses; you determine whether or not there is pus or fluid

present. I know that I have demonstrated that you can get filling defects from a mass of thick, inspissated pus, and if care is taken to get the proper posture and dry the sinus out with air, I do not have fluid levels of different constancy due to irrigation fluid. It is my feeling that saline irrigation is valuable and many times saves me from subjecting the patient to oil injections and further work which I could do at that one time.

There are different types of findings that to me have been helpful in diagnostic ways, the first of which has been emphasized by Dr. Collins as the allergic type case. The case which is most likely to be allergic is the one which shows complete filling defect around the iodized oil. In other words, thickening surrounding this oil is most likely to be of allergic nature. To me that has been extremely helpful in getting a line on the case if I have not been able to bring out the fact that it is definitely allergic according to the history. The next type of case is the one which shows, possibly in the center of the field, a filling defect in which there is a more or less pedunculated defect. Certainly those cases are most likely to be of the polyp variety. The most important thing to me is the case which shows a defect with rounded top which is characteristic of the thing in which we are most interested, and that is pyocele or mucocele. Those are the cases in which we get our distant infections, blood stream infections, arthritis, etc. A large base and rounded dome indicate pus or infected fluid beneath the mucous membrane.

F. V. OVERMAN, M. D. (Indianapolis): In 1930 I had the opportunity of hearing Dr. Collins read this paper before the American Roentgen Ray Society at West Baden, and I am pleased to find that Drs. Beeler and Collins have not in the past three years changed their stand on the value of opaque oil injection. I have used this oil injection in many cases. Dr. Collins showed a film this morning of one of my cases that impressed me as to its value. A young woman came into my office with severe pain in the right side of her face and some elevation of temperature. Transillumination showed the right maxillary sinus black. Every clinical symptom pointed to an infection of this antrum. I felt positive enough of my diagnosis to attempt irrigation, but was unable to get any solution into the antrum.

Immediately we had a primary film of the sinuses made. They showed the right antrum entirely filled. Two days later I injected this antrum with lipiodol, a film was made, and it showed there was no air space whatsoever. Had I been surgically minded, I believe I would have advised immediate operation, but there were certain things that impressed me that surgery was not indicated. I treated the nose twice within the following week in an effort to get drainage and ventilation. Seven days after the film with the opaque oil injection, we had another film made, it showing an absolutely normal maxillary sinus. I then knew



we were dealing with an allergy. Had I had no other experience than this one, I would feel the oil injection of great value, because I might through surgery have caused the patient some grief and certainly no benefit.

I cannot agree with Dr. Carmack about irrigation preceding oil injection. I did this a few times but found that I did not get as accurate a picture as I did by injecting the oil without irrigation.

As secretary of this section I want to thank Drs. Beeler and Collins for coming here to present this paper, which I am sure has been of great value to us.

H. A. VAN OSDOL, M. D. (Indianapolis): When irrigating the antrum previous to having your films made, I still use, occasionally, twenty per cent neosilvol in cases where watery fluid has been injected in the antrum, and I do not get any shadow in the picture. It penetrates the septum and antrum without giving lines or shadows. Pictures are not as clear as with lipiodol, yet beneficial effects result.

H. C. BALLENGER, M. D. (Chicago): I have nothing new to add to what already has been said. I have enjoyed the beautiful films presented. The essayist should be complimented upon his technic and presentation.

I have never been very enthusiastic about opaque oil injections because of the possibility, in my mind, of a great many artifacts and changing pathology, especially in acute infections or in acute exacerbations of a chronic antrum infection. However, I do believe that it has definite value in diagnosis and prognosis in connection with other symptoms. I fully agree with Dr. Carmack in placing a greater diagnostic value upon the type of secretion, if any, that we obtain from irrigations, than from the evidence of pathology from opaque oils. In brief, in my experience, opaque oil has a definite value when considered with other symptoms and signs, but is not conclusive evidence of pathology in itself.

JOHN W. CARMACK, M. D. (Indianapolis): Dr. Collins asked what we use. Personally, I prefer lipiodol because it is a little nicer. It is less disagreeable to the patient than others, and it does give an excellent picture.

I might say in regard to this irrigation that I feel solutions used in any sinus have something to do with the reaction. I think isotonic solution is indicated. I would like to ask Dr. Collins if they have seen any bad results from cases that I have sent where irrigations have been done, as it has been done in all cases of mine that they have seen.

D. O. KEARBY (Indianapolis): When I began to use lipiodol in the maxillary antra, I thought that it showed two definite things, first, the extent of the pathology in the antrum; second, the ability of the antrum to drain normally. This latter was determined by taking a picture in forty-eight hours, to see if the sinus was empty. When Proetz talked about the allergic reactions following these injections,

we went over fifty cases that we had injected and had made secondary pictures in forty-eight hours, all showed allergic or secondary reaction in the antra. This, we concluded, eliminated the use of lipiodol injection as a diagnosis of drainage. To establish the extent of pathology remains diagnostic. While this paper is on maxillaries, I do not believe that we should let it pass, without saying, that lipiodol is equally good in sphenoids. I do not feel that the use of lipiodol in the beginning, three to five years ago, probably stimulated much unnecessary surgery. We have learned much and believe that radical surgery, when lipiodol shows slight changes, is not resorted to as it was formerly.

J. N. COLLINS, M. D. (closing): I would like to emphasize some of the things that have been brought up. One is the choice of the case for injection. This is left entirely to the referring doctor as we do not inject the cases. We do sometimes suggest the method in doubtful pathology. The choice of the medium is also left to the referring physician.

In regard to allergy, I believe some roentgenologists are beginning to feel that they can say something, but we have not come to that point. The case Dr. Carmack pointed out we thought to be allergic because of the marked changes which, within a comparatively short period, cleared up. It seems reasonable to think that this was an allergic condition from the history but we do not feel qualified to say that it was allergic from the films.

Dr. Stewart mentioned injection under pressure. I believe that most of the men are not using this method. Dr. Kearby mentioned the Proetz method. We had a considerable experience with it when it first came out and no doubt it was our fault and perhaps the fault of the men who sent patients in, but we believe that we never got much benefit from it. We found cases in which we thought we had pathology but were always doubtful. Apparently those with whom we worked felt the same way for it has been for the most part given up.

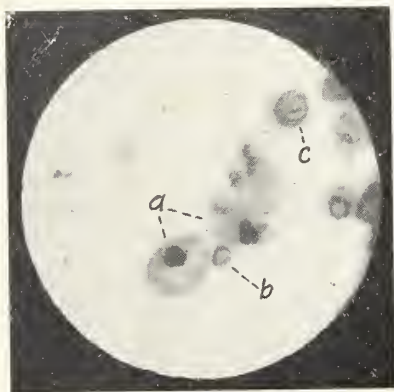
It has not been the practice to inject acutely infected cases; as pointed out in the paper the chronic cases are the ones where most help can be given. We believe, too, that many cases are being done unnecessarily as the primary film gives the desired information. However, we have not argued with the otolaryngologists about this since we feel it is the duty of the roentgenologist to carry out their requests.

There has been a great deal of discussion regarding the taking of films immediately after washing. While we believe with Dr. Carmack that it is possible to dry the antrum, we know from experience that this is not always done satisfactorily. It is our belief that even primary films are better taken before washing or sometimes afterwards, as it seems that even the isotonic solution mentioned by Dr. Carmack might well leave a slight cloudiness.

## AMEBIC DYSENTERY\*

PAUL D. CRIMM, M. D.  
J. W. STRAYER, M. D.  
DARWIN M. SHORT, A. B.  
EVANSVILLE

*Endamoeba histolytica* is the only pathogenic ameba occurring in man, according to Taliaferro.<sup>1</sup> Dysentery caused by the organism *Endamoeba histolytica* is probably endemic throughout the United States. In 1926, Kaplan, Williamson and Geiger<sup>2</sup> reported 38 cases from the Cook County Hospital. Brown<sup>3</sup> reported that many patients treated at the Mayo Clinic for amebic dysentery had always lived in the northern states and Canada. In the examination of the stools of 13,043 Americans, Stiles<sup>4</sup> found that 333 (4.1 per cent) showed this infection. According to Dobell's<sup>5</sup> analysis, the work of Walker and Sellards<sup>6</sup> indicates not more than 10 per cent of the people infected with *Endamoeba histolytica* show any marked clinical symptoms.



Photomicrograph of *Endamoeba histolytica* in fecal smear.  
a. *E. histolytica*; b. red blood corpuscle; c. leucocyte. x450

The source of infection is fecal contamination of food and water. Amebic carriers, like "Typhoid Mary," represent the usual type of infection. A great many chronic cases of amebic dysentery are overlooked because microscopic examination of the stool in the usual case of diarrhea is neglected. In an acute onset of mucous and bloody stools, a diagnosis is more often made on the vegetative form. In either the acute or chronic case an important complication to look for is liver abscess. Relapses are quite common after therapy owing to the persistence of the cyst form.

## CASE REPORTS

We call your attention to this report of three cases recently discovered among the patients admitted to a tuberculosis hospital where amebic dysentery rarely figures in a differential diagnosis.

Case 1260. A white female, aged 24, always lived in southern Indiana. Occupation, waitress. Admitted to hospital on July 6, 1933.

Family History: Husband died of pulmonary tuberculosis five years previously. Her past history was negative. She had always been in good health.

Present Illness: This patient developed a diarrhea in March, 1933. She had from 10 to 12 watery stools daily which often contained blood and mucus. She lost weight rapidly and became quite weak, although she continued to work until April. She was sent by her family physician to a proctologist who advised her admission to this hospital as suspected of having tuberculous colitis. She was having about 15 stools in 24 hours. She was weak and emaciated. Her average weight was 130 and her admission weight was 93 pounds. She had no pulmonary symptoms.

Physical Examination: The physical examination was negative except for some abdominal tenderness. No masses were palpable.

X-ray and Laboratory Findings: The chest plates showed no evidence of any pulmonary involvement. The white count was 9,400, R.B.C. 2,650,000, Hb. 8.05 gm. (Newcomer). The urine was negative. The blood calcium and phosphorus were 10.4 mg. and 4.8 mg., respectively, per 100 cc. A microscopic examination of the stools showed the presence of the *Endamoeba histolytica*.

Treatment: The patient was started on emetine hydrochloride ( $\frac{1}{2}$  gr. b.i.d. for 10 days) given subcutaneously. There was an immediate but gradual reduction in the number of stools. The emetine was repeated after a rest period of one week. At the present time the patient is having one stool in 24 hours, which is negative for *E. histolytica*. She weighs 102 pounds and feels very well. The patient was discharged on August 28, 1933.

Case 1302. This patient, a white male, aged 49, has always lived in southern Indiana. Occupation, carpenter. Admitted to hospital on August 3, 1933.

Family History: Negative.

Past History: Influenza in 1918.

Present Illness: Patient became ill in January, 1933, with diarrhea, 15-20 stools daily. He lost weight rapidly and became quite weak. At the end of three weeks the diarrhea stopped. He became well. On July 25, 1933, he became ill again with diarrhea. He had about 20 stools daily, cramping and tenesmus were very severe. The stools were small, filled with mucus and occasionally exhibited gross blood. He dropped from 150 to 129 pounds in weight.

Physical Examination: The physical examination was negative except for some abdominal tenderness.

Laboratory Findings: The white count was 10,550, R.B.C. 4,070,000, Hb. 14.03 gm. (Newcomer). The Schilling count showed 2 eosinophiles, 19 stabs, 46 segmented, 32 lymphocytes and 1 monocyte. The urine was negative. Examination of the stools showed the presence of the *Endamoeba histolytica*.

\* From Boehne Tuberculosis Hospital. Received for publication September 6, 1933.



**Treatment:** Treatment was started the day after admission and consisted of emetine hydrochloride ( $\frac{1}{2}$  gr. b.i.d. for 10 days), given subcutaneously. On the third day of treatment the stools were reduced to three in number and before the 10 days had elapsed the patient was constipated. A mild laxative was required. He began to gain weight immediately. He was discharged on August 14, 1933, with the admonition that a recurrence was possible. Subsequent microscopic examinations of stools were negative for *E. histolytica*.

**Case 1305.** This patient, a white male, aged 65, has always lived in southern Illinois. Occupation, farmer. Admitted to hospital August 10, 1933.

**Family History:** Negative.

**Past History:** He had malaria at 40 years of age. He was operated on for hernia and hemorrhoids in the years 1913 and 1915, respectively.

**Present Illness:** He possessed a chronic cough for the past eight or nine years, but this always disappeared during the summer months. In October, 1932, he had what he thought was influenza, but was not bedfast. His cough and sputum production became progressively greater.

He gave no history of any intestinal symptoms except a very occasional diarrhea usually induced by a cathartic which he took for constipation. He was also bothered infrequently with attacks of singultus which would last sometimes for a day. There was no weight loss.

**Physical Examination:** Breath sounds in his chest were diminished in the right apex. Post-tussive rales were also audible in this area. The heart was negative except for an occasional extra systole. There was no pain or tenderness in the abdomen. No masses were palpable. The reflexes were normal.

**X-ray and Laboratory Findings:** The x-ray films showed a rather dense infiltration of the right apex with a small area of rarefaction which was a cavity. His sputum showed many tubercle bacilli. The urine showed a trace of albumin and a few pus cells.

**Diagnosis:** Chronic pulmonary tuberculosis, right.

**Treatment:** An effort was made to collapse the right lung with air but a pneumothorax could not be established due to the presence of pleural adhesions. A posterior thoracoplasty was performed (by P. D. C. and J. W. S.) on August 10, 1933. The patient was given a gas-oxygen anaesthetic and portions of the upper four ribs were removed. The patient remained in excellent condition immediately after the operation. However, on the second post-operative day he developed a violent diarrhea. His stools numbered 20 to 40 in 24 hours. They were bloody and contained mucus and sloughed mucosa. The patient suffered a great deal with cramping and tenesmus. His appetite became nil. The vegetative *E. histolytica* were found in

great numbers in the stools the second day of the diarrhea. Emetine hydrochloride treatment was started at once ( $\frac{1}{2}$  gr. b.i.d. for 10 days). No improvement was noticed for about eight days. Quinine enemas (1-3000) gave little relief. The patient lost weight rapidly. On August 18 his white count was 5,400, R.B.C. 3,230,000, Hb. 9.36 gm. (Newcomer). The Schilling count showed 3 eosinophiles, 1 basophile, 35 stabs, 38 segmented, 20 lymphocytes and 3 monocytes. The patient at this time received 1,000 cc. of physiological saline with 50 gm. of glucose added. The operative wound healed by first intention. He continued to cough occasionally and raise a small amount of sputum which was negative for tubercle bacilli. At the end of 12 days the stools were reduced to two or three in 24 hours. His appetite was greatly improved and he was able to be in a wheel chair. He was discharged on September 4, 1933.

#### DESCRIPTION AND LABORATORY DIAGNOSIS

*Endamoeba histolytica* is found in the vegetative (motile), precystic and cystic stage. Generally the vegetative form varies from  $20\mu$  to  $30\mu$  in size. Characteristic hyaline, blade-like pseudopodia, are extruded by the active organism. The ectoplasm is sharply differentiated from the homogeneous granular endoplasm, which may contain engulfed red blood cells. In an unstained specimen the nucleus is inconspicuous or invisible. In stained material the nucleus is spherical, usually  $4\mu$  to  $7\mu$  with a scant peripheral layer of chromatin granules forming an irregular, inverted serrated edge. The karyosome is central. This form is most frequently observed in the acute stages of the disease.

The pre-encystic stage is usually more ovoid. The differentiation of the endo-ectoplasm is less sharp, hence may be confused with the non-pathogenic *E. coli*.

The cystic form is the type usually found in the carrier. It is the infective stage. It is much smaller ( $7\mu$  to  $15\mu$ ) than the vegetative form, contains four small nuclei (to be distinguished from *E. coli* with eight nuclei) as described above. There are usually chromatid bodies in stained material.

Examination of fresh, warm stools, preferably in the original container, is essential. The stools of amebic dysentery vary considerably. In the chronic type the stool is usually formed or semi-formed, containing the cysts; whereas, in the acute exacerbations they are usually watery with bloody mucous flakes containing the vegetative form. These flakes of mucus are transferred by means of a platinum loop to a slide prepared with physiological salt solution. By this choice, preparations are possible which are practically free of opaque debris. The cover glass is carefully added with sufficient physiological salt solution to completely underlay the cover glass. Neutral red (1 per cent) staining of the wet preparation, as advocated by Stitt<sup>7</sup>, as well as ringing the preparation with petrolatum,

were both time-consuming and not particularly satisfactory for diagnostic purposes. Routine stained (Gram's solution\*), and unstained fresh mounts and fixed moist smears are recommended. For fixation, smears are made as previously described. These smears are fixed wet in a modified Schaudinn's solution.† Fixation for 20 minutes is followed by washing in water for five minutes, staining (Delafield's hematoxylin) until a light blue, washing and dehydration in graded alcohols (five minutes each), to xylol and mounting in balsam. Most workers advocate Heidenhain's or Giemsa's hematoxylin for the staining of *E. histolytica*. For diagnostic purposes we find Delafield's hematoxylin used as a progressive stain very satisfactory. The nucleus of the ameba is more chromophilic than are the nuclei of the leucocytes, with which it may be confused. The stained nucleoplasm of the ameba is a dusky purple, whereas the leucocytic nuclei are practically clear. The following outline lists the diagnostic features of *E. histolytica* with those of the non-pathogenic *E. coli* from which it must be differentiated.

#### Wet Mounts (vegetative forms)—

- A. Nucleus greater than one-third the cell content—pus cells.
- B. Nucleus less than one-third the cell content—ameba.

#### I. *E. coli*.

- a. Nucleus fairly distinct.
- b. Cytoplasm undifferentiated.
  1. Coarse granular inclusions, vacuoles, detritus.
  2. Blunt, short pseudopodia—slug-gish.

#### II. *E. histolytica*, pathogenic.

- a. Nucleus indistinct or invisible.
- b. Cytoplasm, differentiated into ecto- and endoplasm.
  1. Ectoplasm—hyaline.
    - a. Blade-like hyaline pseudopodia.
  2. Endoplasm finely granular (adherent bacteria should not be confused with "1." of *E. coli*).
    - a. Contains R.B.C.

#### Stained preparation (vegetative and cyst forms)—

- A. Nucleus more chromophilic than W.B.C. nucleus (Delafield's)
- I. *E. coli*.
  - a. Distinct nuclear chromatin rim with inverted serrated edge.
  - b. Karyosome—eccentric.
  - c. Cyst contains eight nuclei.

#### II. *E. histolytica*.

- a. Chromatin rim less distinct—may appear as dots rather than continuous rim.
- b. Karyosome—central.
- c. R.B.C. inclusions—generally.
- d. Cyst never contains more than four nuclei.

#### SUMMARY AND CONCLUSIONS

1. Three endemic cases of amebic dysentery are herein reported.
2. A positive diagnosis in each patient was made by a microscopic examination of the stool. For diagnostic purposes an organism of slug-like motility containing red blood cells can be considered a pathogenic ameba.
3. Each case responded well to treatment with emetine hydrochloride.
4. In our opinion, any refractory or recurrent type of dysentery, even though not diagnosed microscopically, should be given emetine therapy as a therapeutic and diagnostic measure.

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#### OFFICE TREATMENT OF RECTAL DISEASES\*

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There exists an intimate relationship between rectal and colonic diseases that invites our closest attention. This necessitates the recognition of the proper treatment of rectal disease in order to obtain the greatest relief in any physiological abnormality of the colon. It is observed that spastic and mucous colitis not infrequently are relieved, or the symptoms very materially benefited, by removing rectal pathology and re-establishing the proper musculo-nervous relationship between the different parts of the intestinal canal. The results are so gratifying in successful cases, and the health and well-being of the patient so much improved, that

\* Gram's Iodin Solution:

I<sub>2</sub> . . . . 1 gm.  
KI . . . . 2 gm.  
H<sub>2</sub>O . . . 300 cc.

† Schaudinn's Solution (modified):

Sat. aq. sol. HgCl<sub>2</sub> . . 100 cc.  
Ab. Alcohol . . . . . 50 cc.  
HAc (glacial) . . . . . 6 gtt.

\* Presented before the Indianapolis Medical Society, Feb. 7, 1933, and before the Hancock County Medical Society, March 10, 1933.



few therapeutic measures are rewarded with greater satisfaction. If a doctor exercises judgment in the proper selection of cases, and is familiar with the physiology and anatomy of this region, there is no field in medicine that gives more satisfactory results than the treatment of rectal diseases.

The diagnosis and treatment of anal and rectal diseases have their distasteful features, and because of the hesitancy of the patient to mention his rectal distress, the internist often ignores this portion of the anatomy altogether. Until every physician acquires the proper instruments and the inclination to make an ano-rectal examination, these patients will continue self-treatment with proprietary medicines, and patronize the unscrupulous practitioner, in attempts to get relief. The progressive physician who approaches an honest diagnosis will not disregard symptoms referable to the anus and rectum which so often have a very definite bearing on the health and comfort of the individual. The general practitioner is in the position to do the greatest amount of good with these patients, and should insist upon making a complete physical examination.

It is preferable, in most rectal diseases requiring surgery, to confine the patient in a well equipped hospital, and have a period of rest following an operation. Likewise, it is advised by our health officers and general practitioners that the best way to treat a common cold is to confine the patient to bed for a few days. Admitting the desirability of a speedy recovery in both instances, often there are mitigating circumstances that preclude following this advice. Occupation, finances, the antipathy against being hospitalized, and the fear of a surgical operation where a general anaesthetic is required, all have their reactions, and unquestionably cause many of these cases to seek advice from the irregular practitioner, who guarantees a cure without the use of a knife.

The cases treated with unsatisfactory results are those which are poorly selected, without regard to the limitations of office treatment. The simple, uncomplicated, non-inflammatory cases are amenable to office treatment in most instances. The after care in these cases is equally as essential as those admitted to the hospital, where a general anaesthetic is administered. Patients suffering from rectal diseases have every reason to expect equally as good results from treatment as those complaining of ailments elsewhere. There are many cases where efficient and painstaking operations have been performed without the relief expected, principally because the surgeon loses interest immediately following the operation, and turns over the after care to an inexperienced assistant. The follow-up treatment, in these cases, is just as essential as the operative procedure.

There is no thought of imposing on you the discussion of the treatment of all the diseases which are amenable to office care, nor is there any dispo-

sition to burden you with the different methods of treating any given malady. Only recognized methods which can be successfully used with safety and which will give the patient satisfactory results are to be considered.

#### EXAMINATION

Every patient coming with the history of rectal disease should have a thorough examination. This is imperative in every case, whether the treatment be made in the office or in the hospital. It becomes embarrassing, after treating a patient for fissure or hemorrhoids, to find that carcinoma or polypus is the real cause for the distress. The liberal use of the anoscope and proctoscope will differentiate the source of the trouble, and explain the cause of many of the symptoms. The wisdom of a complete preliminary examination becomes evident when, after repeated operations, the patient is found to have a malignancy of several months' duration.

#### PREPARATION

The usual preoperative preparation consisting of an evening and morning enema is desirable, but with an empty ampulla in conjunction with the normal daily evacuation, much minor work can be safely done by the thorough cleansing of the field with soap and water and mild antiseptics. Ordinary operative cleanliness is sufficient in such an infected field where asepsis is not possible. All mucous surfaces and submucous tissues possess a certain immunity against infection from bacteria, with which they are in constant contact.

#### ANAESTHETIC

The local anaesthetic which gives almost universal satisfaction is a 2 per cent solution of novocaine with five minims of adrenalin to the ounce, as a preliminary injection. Just beneath the line of injection of the novocaine, 2 c.c. to 3 c.c. of benacol solution is cautiously used as a post-operative anaesthetic. This latter anaesthetic is distinctively beneficial, rendering the operative field practically insensitive for a period of three to five days. This preparation consists of equal parts of para-aminobenzoylethanol benzoate and penmethyol 5 per cent each, in rectified sweet almond oil. This oil preparation has been extensively used by Yeomans<sup>1</sup> in the treatment of pruritus ani with excellent results. The benefit obtained from the use of this anaesthetic is most convincing when the patient states that he has experienced very little distress following the operative procedure.

The skin is first anaesthetized with phenol, and the initial puncture of the needle made through this point one inch posteriorly to the anal margin. The posterior commissure to the anal margin is first anaesthetized, and without removing the needle, the perianal subcutaneous tissues are infiltrated. The perineal body can be infiltrated easily through this same puncture by the lateral slipping of the skin in front of the needle. Under the guide of

the finger in the anal canal, the sphincter muscles are anaesthetized by depositing novocaine at five different points. The first is in the posterior commissure and includes the muscle, the others at two separate points in the sphincter muscle on each side of the anal canal. These selective points can only be definitely located by the guiding finger, and after experiencing the proper place to inject the fluid. These lateral injections are about equal distances between the anterior and posterior commissure.

#### RECTAL DISEASES AMENABLE TO OFFICE TREATMENT

Among the rectal diseases that are particularly adaptable to office treatment, with most gratifying results, are hemorrhoids, fissures, cryptitis, papillitis, polypus, abscess, pruritus, and simple direct fistula. These diseases, when uncomplicated, lend themselves admirably to ambulatory care. Every one has his disappointments, but as we become more selective in choosing the patients for office treatment, the number of dissatisfied patients will grow less.

#### HEMORRHOIDS

There are two types of hemorrhoids: those covered with mucous membrane, or internal hemorrhoids; and those covered with skin, or the external type. The treatment of the external variety should be by removal whenever it is thought advisable to interfere, or when requested to do so by the patient, for sanitary reasons. Internal hemorrhoids are successfully treated by several different methods. The injection treatment is one of the best known and is being very extensively used. With the proper selection of cases, excellent results follow where the technic is carefully followed, and the solution for injection is administered in the proper amounts and concentration. These refinements are only acquired through experience and the follow-up of cases over a period of years. Several different solutions are recommended, and while they are all useful, I have experienced the least amount of grief following the use of 5 per cent solution of quinine urea hydrochloride. Terrill<sup>2</sup>, in 1916, was the first to advocate quinine urea for the cure of hemorrhoids by the injection method. He says, "The radical operation for hemorrhoids, until a few years ago, was the only recognized method. Every other means seems to have had associated with it a certain degree of quackery. The fact that the injection treatment has survived at all under such conditions is truly remarkable, and is good evidence that there is something of value in it."

While the painstaking and cautious use of the injection treatment gives admirable results, the indiscriminate use is very harmful. I am finding a number of cases with abscesses, internal and external fistulae, which have resulted from improper use of this treatment by the initiate. Dr. Curtice Rosser<sup>3</sup> reports a series of 35 cases of tumor formation following the injection of unknown solutions into the rectal submucous tissue. Twenty of these

had rectal occlusion and 15 had induration without stricture. These tumor formations were produced by the injection of oily menstruum. Those oils with a paraffin base produced the greatest amount of tumefaction and fibrosis. Olive oil produced the least amount of irritation. Dr. Rosser is not favorably impressed with the promiscuous use of the injection of large amounts of oily preparations for the treatment of rectal diseases.

The electrothermic methods used for the destruction of hemorrhoids are desiccation and coagulation. The application is made by the use of an electro-surgical clamp or a pointed active electrode. Any well recognized diathermy machine that delivers a steady current and a spark of sufficient intensity will be suitable for this work. The monoterminal current is sufficient for the removal of most hemorrhoids of medium size, and is not so dangerous in the hands of the inexperienced. I have made limited use of the electrothermic method in the treatment of hemorrhoids and find that it is an excellent method when cautiously used. The size of the hemorrhoids, the amount of tissue to be destroyed, and the depth of the coagulation are all to be taken into consideration, and the anatomical parts and sense of proportion must be evaluated. Very little after pain will be experienced when the subhemorrhoidal tissues are infiltrated with benacol. The hemorrhoids can be removed singly a few days apart and the individual permitted to continue doing light work. However, to arrange for a rest over the week-end relieves the nervous strain which always accompanies any operative procedure. This should be insisted upon when at all possible.

Enlarged papillae that require removal, and inflamed crypts that need drainage, may be easily treated through the anoscope. The high frequency desiccating current can be used to an advantage here. By the use of a curved reflow needle through a bakelite anoscope, the pectinate tissues may be anaesthetized without the pain of a needle prick, and the desiccation of a papilla or crypt completed while the patient lies quietly wondering what is being done. It is remarkable with what ease and safety a rectal polypus can be removed by the electrothermic method. An insulated snare is thrown around the polyp and the base coagulated. The remaining manipulation is similar to that of a tonsillectomy without the danger of hemorrhage. Bleeding must be scrupulously guarded against when excision is the method used for removal.

#### ABSCESS

Abscesses should be opened at the earliest opportunity after a diagnosis has been made. Postponement does much harm to the patient and is responsible for most rectal fistulae. A persistent, throbbing pain in the rectal region requires an examination, and whenever a round painful mass can be felt protruding into the rectum by the examining finger, an abscess is present and should be evacuated im-



mediately. A liberal incision, with the proper after treatment, will many times prevent the formation of a fistula in these early abscess cases.

### FISTULA

Simple fistula of short duration may be excised in the office. As a general rule these cases are best treated in the hospital. The extensive dissection, which is required when the tract is tortuous, is best accomplished under a general or regional anaesthesia. Locating the internal opening requires time and painstaking care, and unless the proper surgical technique is followed, and the internal opening found, failure to cure the fistula will follow. Recently I was consulted by a lady who had submitted to five operations for the cure of a simple fistula, without results. By the use of methylene blue solution the internal opening was definitely located. This patient was hospitalized and the fistulous tract thoroughly eradicated. The after care was personally supervised and the wound made to heal from the bottom. A clean wound that is efficiently drained and made to heal without bridging is the secret of success in the cure of fistula.

### FISSURE

A fissure is a linear, painful, ulcerated surface in the anal canal. It is ordinarily located in the posterior commissure and is one of the most painful diseases experienced in this region. A fissure is often perpetuated by taking hydrocarbon oil which produces a small, soft stool. I am convinced that many of our constitutional diseases having symptoms attributed to the absorption of intestinal toxins are caused by easing the stool through a painful anal canal by the use of mineral oil. Injecting a 5 per cent solution of quinine urea hydrochloride or benacol solution beneath the fissure, followed by cauterization of the fissure proper with trichloroacetic acid, or 20 per cent to 50 per cent solution of silver nitrate, will be sufficient in many cases. This treatment is useful in recent fissures, but it is often necessary to supplement this by excising the sentinel pile, which is usually present. Sphincteric spasm that does not yield to quinine urea may require incision through the base of the fissure into the sphincter muscle. Divulsion of the sphincters to place the muscles at rest is deemed necessary in many old cases where a great amount of induration is present. Where this is required a general anaesthetic is usually advisable.

Rectal pathology plays a very important part between the physiological relationship of the rectum and the colon. A dysfunctioning colon or spastic colitis should be properly interpreted by the diagnostician who should determine the probable systemic effect that may take place from improper elimination. If the minor cases of rectal diseases can be properly managed without confinement, the proctologist will have played an important part in helping to restore to health many invalid patients,

who otherwise would continue to carry their troubles with them.

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## WHAT SHALL WE TEACH THE PUBLIC CONCERNING HEALTH AND DISEASES?\*

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The public has a right to know certain things about itself. Of vast importance to every man and woman is his or her state of health. It affects his or her life expectancy and determines his or her ability to make plans for the future. Every plan that may be made can be utterly destroyed if health or life is lost. The medical profession must remember that during the years which have immediately preceded us a great many avenues for medical instruction have been opened to the public. Two score magazines are running health articles in each issue; at least a dozen syndicated health columns are being used by newspapers; books of all kinds are available; pamphlets, lectures, health instructions in schools, instruction by physicians, nurses, quacks, charlatans and shysters is easily had. Advertisers make enormous claims for their various products and these claims are commonly based upon the statement that the commodity for sale is of value in preventing disease.

There is no question whatever about the fact that the appetite of the public for instruction of this sort has been aroused. It is not a question as to whether or not the public will get such instruction, it is a question as to who shall give it. If the medical profession does not teach the public, someone else will.

It is necessary also to come to some sort of a conclusion as to what we shall teach the public. Obviously very much of the great body of medical information is not suitable for public instruction. Some of it is too technical; some of it is too morbid; very much of it is not to the point inasmuch as the layman does not need to diagnose or treat

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medical cases, but merely to take care of his own body and needs. Physicians themselves do not pretend to know more than a small amount of all that is known concerning medical subjects. Naturally the layman needs to know far less than the physician, but there is a small body of knowledge concerning which the layman should be instructed.

#### PUBLIC HEALTH

Public health is really a specialty. This does not mean that the general practitioner should make no attempt to practice it any more than it means that the general practitioner of medicine should make no attempt whatsoever to practice the simpler phases of urology, otology, pediatrics and the like. Every physician should practice public health in its simpler phases. He should, however, look to those who have given particular attention to the subject before he embarks on the more complicated phases of the subject. As one who has given considerable thought to the matter and who may possibly qualify as a specialist in public health, I wish to present certain principles which I believe to be important in the practice of public health. Before going into the discussion of the significant points a few comments concerning phases of the work which are either of doubtful value or positively meddlesome may be of interest.

In the first place we call attention to the multiplicity of health rules. On one occasion we set about to enumerate as many of these rules as possible. We found that, depending on one's zeal and thoroughness, it would take from five to eight hours a day merely to perform the various rites which health enthusiasts and faddists have told us are necessary to a healthy and vigorous physical state of existence. Obviously it is impossible for those who do the work of the world to devote so much time to the physical care of themselves. It is hardly necessary to suppose that all of these things are really essential in the health program. Furthermore, we should like to point out that in case an individual should spend so much time fussing with himself it is not unlikely that he would bring about an exceedingly unhealthy state of mind which might easily lead to neurasthenia and related neuroses. Mental health demands that the major portion of our attention shall be given to objective rather than to subjective activities. We fear greatly for the mental health and pose of the individual who is constantly apprehensive concerning his diet, his exercise, his fresh air, his state of cleanliness and his various physiological activities.

We believe that it is not well for the health of the public to make it excessively health conscious. Many people are becoming so oppressed with the technicalities of living that their attention is being detracted from the really vital purposes of life itself. Health is being taught as though it were an end in itself, but health should be considered as a means to an end. My own personal health is of importance because it enables me to do my

work, to support my family, and to go about in public without jeopardizing the lives and the health of other people, but it is not the most important thing in my existence that I should be a good physical specimen. If, for example, the exigencies of my work or the needs of my family are such that I should jeopardize my own health it would be absurd to suppose that my health were more important than my duty. As a matter of fact a great many people would be much better off if they gave barely such attention to matters pertaining to health as would suffice to insure elemental care for their bodies. Many or most of our physiological functions are better performed when they are given no attention whatsoever.

#### "SAFETY FIRST"

Closely related to the above fallacy that health is more important than anything else is the sister principle of "safety first." There are innumerable instances in which safety should not be considered first—or at all. The modern school system in many instances is teaching our children to be afraid to across the street, when they should be teaching them how to cross the street. It is doubtful if fear is ever a useful emotion. Men and women are afraid to eat for fear they will get fat; afraid to diet for fear they will unbalance their ration; afraid to exercise for fear they will injure their heart; afraid not to exercise for fear they will lose their youthful figures; afraid to drink their neighbor's "hootch" for fear of poisoning; afraid not to drink it for fear they will be considered narrow-minded. They are afraid to live for fear they may die.

We are reliably informed that Lindbergh was not following the principle of safety first when he struck out across the ocean; and that George Rogers Clark and his men were not following the safety first rule when they waded through high waters to take the fort at Vincennes. "Safety First" may be all right as a motto for a railroad, but as a personal creed it is one for mollycoddles. God pity us if we should ever have to go to war with an army of "safety first" boys. Picture a football team composed entirely of athletes interested first in their own personal safety.

There is a marked tendency on the part of many teachers and school nurses to make health teaching unattractive. Apparently they seem to believe that those things which are good for one must of a necessity be distasteful. They insist upon the value of health "chores" and are requiring the children to make a check mark on a record sheet when they take a bath, wash their teeth, or drink a glass of milk. No one likes to do chores and we can think of no more certain way of making health teaching unattractive than to force it upon unwilling children. The outstanding characteristic of healthy people is that they are happy. Not happy every moment necessarily, but ready to come bubbling up if they should happen to be doused in the waters of adversity. Such being the case,



we believe that health teaching is happy teaching or it isn't healthy teaching. Long-faced, sour-minded teachers of hygiene are doing more harm than they are doing good. They would have us believe that those foods that we like will rot our teeth and cause constipation, whereas everything that we do not like is just what we should have. They insist upon spinach and codliver oil whether we need it or not. They permit us never to forget that we have a delicately adjusted body which is easily thrown out of adjustment, when as a matter of fact normal, healthy individuals have a highly stable body which is able to compensate for most of the minor difficulties in which it may find itself. We should like to remind such people that it is better to enjoy a short life than to endure a long one.

Consider the matter of vitamins, for example. Everyone can name a dozen unattractive foods which are rich in vitamins. After giving the matter considerable thought, however, we are unable to think of a food which contains more vitamins than a dish of strawberries with cream. As a matter of fact most persons who have had anything like a proper training in health matters have learned to like to do the things that they should do. It is a privilege, for example, to take a bath; it is a pleasure to use a tooth brush; most people like to play and get out in the sun. I sleep with my windows open when the weather is fit, not because I should but because it is pleasant to do so.

#### HEALTH PROGRAM

A moment's reflection will tell one that the health program is not complicated. The simple life is undoubtedly the more healthy one, provided a few fundamental principles of sanitation and hygiene are observed. When we hear a health lecturer making the subject difficult we cannot resist the impression that he is either trying to show his education by using big words or does not understand the subject himself. It is far easier to be technical than to be simple. A person of average intelligence and small training can read a technical article on a health subject and repeat it parrot-like, but it takes a genuine understanding of the subject to summarize it and cull out the nuggets of pure gold. If the health program were as complicated as some would have us to believe, it would be impossible for the wild animals to live it, and yet they do maintain a state of health. By their natural methods of living they avoid dental caries, pyorrhea, constipation, malnutrition, most of the constitutional diseases, neuroses, venereal disease, and most of the deficiency diseases. Their skins and coats are clean and their breaths are sweet, though they do not bathe with warm water and soap nor do they use tooth brushes, tooth paste or mouth wash.

As might be expected the health program has become rather expensive, and we have developed many habits and practices which are now making

a very considerable drain upon the family purse. We should like to call attention to the fact that the really essential things in the health program are either cheap or cost nothing at all. The simple, staple foods are best. Going barefooted is better for children than wearing shoes; playing games is better than paying to see games; amateur entertainment is safer for the morals of the children than are lurid movie films. A quiet evening at home with the children is less expensive than the night club whoopee. Water is cheaper than beer; fresh air costs nothing at all; sunlight can be had for the asking. The free library is full of good books to read; a hike through the parks or fields is infinitely better for one's health than an afternoon of bridge. The simple delights of an evening at home with the family will hardly be marred by the fear of exposure to venereal diseases. Your children need your company more than any other single thing. Conversation, story telling, oral reading, and the playing of home and folk games are lost arts which might be revived.

From a health standpoint it is certainly better to eat simple food than pie and dessert. Our children have asked for bread and we have insisted upon giving them cake. It cannot be shown that automobiles, evening clothes, palatial fraternity houses and collegiate "high jinks" are conducive to intellectual advancement or physical or mental health at college, but they certainly are expensive.

Extravagant claims are made by advertisers and we have been foolish enough to swallow their propaganda. A salesman told me that every nook and corner of my house ought to be the same temperature day and night, week after week. He said the health of my family depended upon it. He said that I was ruining my wife's health and making her do the most menial of labor when I allowed her to put in a couple of shovels of coal into the furnace in the middle of the day. A vacuum cleaner salesman told me that the emptying of a vacuum cleaner bag is deadly. He couldn't explain why the germs which are so dangerous in the bag hadn't killed us while they were in the rug before they were in the bag. The man selling electric refrigerators would have us believe that those who use ice refrigeration are living in constant danger of ptomaine poisoning. Aluminum ware people say that slivers of enamel are shortening our lives, and the enamel ware salesman assures us that salts of aluminum are highly poisonous and will cause cancers. Dated coffee will make you mentally alert, whereas stale coffee, even in small amounts, is fatal to charm and mental efficiency. It is incredible that intelligent people are caught on such obvious hooks.

Three times a day the layman comes to the table to eat. Before each meal his wife has given considerable time and thought to the subject of food to the end that her family may be properly nourished, and also especially in these times, in the hope that she may reduce the family expenditure to the minimum. Food is usually the largest item

in the family budget, and if for no other reason it demands a lion's share of attention. Time does not permit us to go into detail concerning the many food fads which now complicate the problem of feeding a family. Suffice it to say that they reach the limits of absurdity. We should like to call attention to the fact that every species of animal must of necessity know what to eat, else it could not have evaded biological extinction so long. It is interesting to speculate that everyone of our ancestors has succeeded in nourishing itself long enough to have reproduced itself at least once. We know that such must be the case else we could not be here. It is vastly reassuring to remember that all of this was accomplished through eons of time without the services of the amateur or professional dietitian. We do not wish to ridicule any phase of the great program of adequate nutrition which has been erected in the past few years. We would merely call attention to the fact that the same foods are available as of yore and that instinct, except in a mighty few instances, is a more reliable guide than so-called science has been in the past. We recall that it is but a short time since we were taught that bananas were not fit to eat; that tomatoes were poisonous; that raw foods could not be digested; that boiled milk was constipating; and that ice cream was not fit for children to eat. A moment's reflection will assure you that instinct and common sense are safer guides than the teachings of those who believe that food is a duty and a chore.

On the occasion of the meeting of the American Chemical Society in this city some two years ago a popular lecture was given by Professor Rose of the University of Illinois. This well known authority on nutrition summarized his lecture by saying that while all of the various nutritive principles which he had mentioned were essential to health there were only three which were likely to be scantily provided in the average diet. Those three are lime, vitamin D, and iodine. How vastly reassuring this is when we recall that lime can be had in abundance by eating such foods as milk, vegetables and fruits; that vitamin D can be had by getting out in the sunlight, eating eggs, milk, and butter, or by taking various vitamin D concentrates if worse comes to worse; and that iodine in such amounts as are needed is to be had in practically every sample of table salt that can be obtained at the grocery. Apparently then there is little to worry about from the standpoint of food.

We should like to call attention to the fact that the whole food program can be summed up in one sentence, and we challenge the members of the medical profession or any dietitian who may chance to hear or read this article to add one important word or phrase to the following sentence. A balanced ration is an abundance of a variety of clean, wholesome, not too denatured, food, carefully prepared, attractively served, and eaten in peace

and contentment. If there is anything that this menu lacks we feel sure that it will be adequately supplemented if common sense is used and particular preference shown for the protective foods—milk, vegetables and fruit.

#### MALNUTRITION

Malnutrition most certainly is an important subject. We tremble for the physical welfare of the child or adult who is chronically malnourished. But malnutrition is a medical condition and not one which the layman can accurately diagnose or treat. It certainly cannot be detected by the use of a yardstick and a pair of scales alone. Among the many causes of malnutrition which have been cited we wish to stress the one which underlies them all. The child which eats, sleeps, plays, works, and lives without intelligent parental and medical direction is very likely to suffer from malnutrition. A moment's reflection will convince you that nearly all malnutrition is the direct or indirect result of lack of intelligent parental care. Many children who are malnourished have too much parental care, in which case it is not intelligent.

With regard to overnutrition or obesity the layman needs to be warned that the condition is by no means so simple as it seems at first thought. The heredity of a given individual must be taken into consideration—his physical type, his habits, and his occupation. There are safe ways for some people to reduce their weight. There are likewise dangerous ways. Except in a few instances in which a small reduction is attempted, medical advice should be sought in every case before reducing measures are begun.

Before going forward with the positive phases of the question, please permit the enunciation of certain general principles before the details are attempted. We would insist that the public be convinced, if possible, that disease is the logical effect of an adequate cause. Until this principle is accepted the layman is bound to be ruled by tradition and superstition. It is true that the layman cannot understand all of the relations, nor for that matter can we. Neither can we understand everything that goes on in an automobile motor, but most of us know enough about them to make minor adjustments ourselves and go to the garage for major ones. Certainly we all know that in the operation of mechanical devices the laws of cause and effect rule absolutely. The public must be brought to the same way of thinking concerning physiological matters.

Preventive measures consist simply in the correction of such conditions as may cause disease before they have caused disease. But how can the layman correct these conditions unless he knows what they are? Likewise, he must know that treatment, diagnosis and prognosis are medical functions of much complexity. He should be led by indirect means, if possible, or by more direct means if necessary to the realization that the medical profession is the best informed group con-



cerning such matters. He should be taught to go first to his family physician as a friendly and competent member of that group. He should know that there are rules of medical ethics governing the relation of doctors to each other and to the public. By that means he may be led to understand that the practice of medicine is a high-minded professional activity and not one that is properly subjected to the evils of cut-throat competition and personal back-biting. He should know that medicine in its highest form is a great organized endeavor which holds for its primary object the welfare of all mankind. With this sort of a background, most of which will of necessity be taught incidentally rather than directly, the layman will be led into a position where he can absorb vital health information and make it the basis of a wise philosophy of life rather than a hodge-podge of stupid and ridiculous health fads and superstitions.

#### INFECTIOUS DISEASES

The layman must be informed concerning the general nature of infectious diseases. He should understand in a general way the manner in which bacteria are spread into the environment and how they are taken up from the environment by the susceptible person. In order that the problem may be made as simple as possible all infectious diseases may be divided into four groups, and this division should be one that is familiar to every man, woman and child old enough to understand. The problem of teaching this information is simplified by the fact that in our particular community that group of diseases spread by the bite of insects need not concern us as a practical problem. We have then three groups of infectious diseases which will be briefly described in the following paragraphs:

First, the filth-borne diseases, such as typhoid fever, dysentery, summer complaint, food infections, cholera and the like. All of these are diseases of the bowel. In all of them the germs pass from the bowel into the environment, and in all of them the susceptible individual catches the disease by eating or drinking substances which have been contaminated with human excrement. Filth may be disseminated in water, milk, or food, particularly uncooked foods, and is carried as a rule on the fingers of those who handle food and on the legs of flies, rodents, or vermin which run over our food. The need of proper sewage disposal, garbage collection, sanitary privies, clean water, clean pasteurized milk, sanitary eating places, and other such appointments is too evident to require elaboration in this place. It may not, however, be quite so evident to the layman and it is our duty as physicians to keep this matter constantly before the public.

A second group of diseases are those of the respiratory system, such as measles, scarlet fever, diphtheria, influenza, colds, tuberculosis, pneumonia, meningitis, and the like. While some of

these diseases do not seem at first thought to be respiratory, all of them first invade the body through the upper respiratory tract. They leave the body in the form of sputum, saliva or as mucous exudates. Sanitation does not play an important part in the control of these diseases. Water and milk, sewage and garbage usually have nothing to do with the transmission of diphtheria. In this group the germs are commonly spread by bad hygiene rather than by bad sanitation. People who live in badly heated and ventilated homes; people who trade saliva; those who cough and sneeze in public; those who spit promiscuously; those who drink from common drinking cups, and those who refuse to observe the general rules of personal hygiene are most susceptible to these infections and also much more liable to spread them in the community. Much progress has been made in recent years in the control of these diseases, but much still remains to be done. A large part of the health instruction which is given to children should be along the lines indicated here. Children need particularly to learn that saliva, sputum, and mucus should be cared for in ways which make it impossible for the germs to be spread to the community.

The third group is that consisting of those diseases which are spread by actual contact with the diseased person, animal or contaminated object. Members of this group may be subdivided into three groups; namely, diseases of the skin and scalp, such as ring worm, impetigo, "athlete's foot," and others. The manner of their spread is obvious. Secondly, wound infections of various sorts, including pyogenic wound infections, blood poisoning, tetanus, rabies, and the like. The handling of such wounds properly comes under the discussion of first aid, which is proper popular instruction when not carried to excess. The third group is that of the venereal diseases. Undoubtedly, from a practical standpoint the venereal diseases are more important than all of the other infections put together, and safety demands that the layman should be given such instruction as will enable him to know the dangers, to understand how the disease is contracted, to use suitable prophylactic measures, to recognize in a tentative way the early symptoms, to understand the need of early and thorough treatment, and to appreciate the danger to the community which exists in an unscrupulous person who is suffering from such an infection. It is extremely important that the public should know that venereal diseases can be contracted by persons who are innocent of sexual misdemeanors. Ignorance is undoubtedly the most important ally of the venereal diseases.

The outstanding characteristics of the mortality statistics of recent decades is that the organic diseases are on the increase, while the infectious ones are showing a satisfactory rate of decline. Organic heart disease is now the "captain of the men of death," and indeed kills about twice as

many as does the next most common cause of death. The causes of this condition are coming to be fairly well understood. Undoubtedly, a large part of the increase is due to the fact that so many more people are living into the age when organic heart diseases may reasonably be expected to take their toll. It is also significant that people are living under heavier stress than was formerly the case, and that this stress tends to cause cardiac breakdown. The role of focal infections is now pretty well understood and millions of tonsils and teeth have been sacrificed. We feel that it is proper that the signs of bad tonsils should be understood in a general way by the layman and that he should appreciate the probable consequences following the harboring of such diseased organs. We condemn, however, in a most emphatic language, the attempt of Dr. Brady in his health column to tell how the tonsils should be removed. This is strictly a technical matter and one in which the layman has no intelligent appreciation. We doubt if there is a better example of bad public instruction in health matters than Dr. Brady's insistence that tonsils be removed by electro-coagulation. Provided the information can be handled in such a way that the patient is not made morbid, we believe that accurate instruction in the hygiene of the heart is proper and legitimate teaching for the public. The high mortality of organic heart disease demands that the medical profession do everything in its power to curb this group of diseases.

Considerably more difficult and very prone to be misunderstood is information concerning the arteries and blood pressure. It is doubtful if more than an extremely small percentage of laymen can understand any kind of accurate discussion of blood pressure and arteriosclerosis. He can, however, understand the causes which probably tend to bring about this condition, and should be instructed in the underlying causes of cardio-vascular-renal degeneration. We submit as possible causes of this condition—causes which the layman can understand in a general way—heredity, constitutional diathesis, "living too fast," excessive food, lack of sleep, chronic focal infections, and intoxicants of various sorts.

Other organic diseases need to be understood to some extent. We do not expect a layman to be able to make an accurate diagnosis of diabetes, but we believe that he should be sufficiently informed that he will recognize the need of consulting his physician when he observes that he is suffering from excessive thirst, polyuria, and related symptoms. We do not expect him to understand the significance of a crop of boils, but think that he should know enough to consult his physician about such a matter. With every other condition of consequence there is some symptom or group of symptoms which, if marked to any degree, should send an individual to his family physician. It is not necessary to enumerate such symptoms here.

Recent years have seen a large increase in the

death rates from cancer and other neoplasms. The fact that more people are living into the cancer age is of course largely responsible. Cancer is enormously dreaded by the average individual and as a matter of fact there is coming to be considerable reason for apprehension. There are those who question the wisdom of spreading information concerning cancer for the reason that not a few individuals are in danger of neurotic tendencies, which in some cases may be nearly as bad as the cancer itself. We feel, however, that there is little choice in the matter. If we wait until cancers are far enough advanced to cause marked clinical symptoms, tumor and pain, we have usually waited until the cancer is inoperable. We must teach the public to recognize in a general way the symptoms which an early cancer assumes. While it is true that some people may be made somewhat neurotic when they are reminded of the possibility of cancer, we can do no less than point out that certain lesions of the breast, of the uterus, of the skin, lips, and other organs are often more significant than they may seem to the lay eye. Unnatural hemorrhage from the womb does not mean that a given woman has cancer. It does mean, however, that she has some pathological condition which deserves at least to be diagnosed and she should be taught to go to her family physician or to such a specialist as he may designate. It is unlikely that surgical procedures will become much more efficient in the treatment of cancer than they are at present. Our hope is then that we may bring the patient earlier to the doctor that we may possibly find the predisposing causes of cancer and teach the patient how to avoid them, or that we may possibly discover some brilliant remedy which will enable us to cure cancer in an advanced stage. Those who are most familiar with the problem have little hope except in the first; namely, that we shall bring the patient more promptly to the physician. It is well for the layman to know that cancers are always small before they are large, always localized before they are generalized, always painless before they are painful, and nearly always operable before they are inoperable.

Of vast importance to the individual, to the family and to society in general is the welfare of the mother and the child in the prenatal and puerperal period. In recent years much progress has been made in teaching the mother to consult the family physician as soon as she finds herself pregnant. This has already been of great benefit to the welfare of women and children, but there still remains much to do. The only way by which this contact may be brought about is by public instruction concerning the matters and the particular problems of this trying time. Information given to the public on this subject should not be alarming or the occasion for worry on the part of the expectant mother. Unfortunately, in my opinion, much harm has been done by well-meaning



persons and by those who are seeking to capitalize the general interest of the public and the natural anxiety of women in this subject. Paul DeKruif's recent article in certain women's magazines affords an excellent example of everything that is wrong in this kind of teaching. One can respect the medical profession for assuming so much responsibility for the high maternal death rates of this country, but the type of teaching that DeKruif—who is not a physician—has been selling to women's magazines has exceeded the limits of safety and propriety.

We have been perhaps too free to admit that our maternal death rates are the highest in the world. The fact of the matter is that they are high for the reason that we have the most accurate body of statistics in the world, and that every possible effort is made on the part of those compiling the statistics to make absolutely sure that we lean in the right direction. It should be generally understood that our statistics do not easily compare with those of many other countries. For example, in most countries deaths following abortions are not counted as puerperal deaths. In this country everything, even remotely connected with the emptying of the uterus, is so classified, and even cases in which women die of pneumonia, tuberculosis, heart diseases, nephritis, and various other ailments which existed before the woman became pregnant are often attributed to puerperal causes. It is very well for us to charge everything possible to this cause, but it may not be well for the public to get the idea that the puerperal state is one of great danger. We should call to mind the fact that the life expectancy of women is considerably higher than that of men, even though they do have to undergo the hazards of childbirth. The fact of the matter is that the life expectancy of a healthy pregnant woman is usually better than that of her equally healthy husband. The public should know that, provided the mother is legitimately married and does not make an attempt to produce an abortion, the danger from bearing children is very small. If we then bear in mind the precautions which should surround a woman during the prenatal period and those which should have protected her against pregnancy when physically unfit for such an ordeal, it would seem that too much fuss on the part of the layman has been made concerning this matter. It is a fact that it is safer for women to bear children than not to bear children. Few women who have never had a child reach the age of eighty years, while such an age is not at all unusual in those who have had children. We are extremely anxious that every possible precaution be taken to protect the mother and child because we are convinced that they represent the growing edge of civilization and culture, but we are also extremely anxious not to add to the real hazards of pregnancy the mental hazard which is being erected by many well-meaning propagandists.

Closely related to this subject is the matter of

birth control. The essayist is frequently asked if he believes in birth control. Certainly he believes in it just as he believes in every other kind of control. He wouldn't have an automobile if he couldn't stop it, nor a radio if he couldn't turn it off; but he believes that it is useless to have an automobile unless he starts it and uses it to go some place. Automobile control means the ability to start, to steer, to regulate the speed of, and finally to stop the automobile. It is highly essential that we teach the public that first class citizens should have a reasonable number of children, and that third class citizens should have none. It is certainly a reasonable assumption that there are families which should not have children. In many instances the physician is in a position to know that the health of a particular woman is such that pregnancy will be a considerable risk. In such cases the physician should be able to instruct her personally as to methods of contraception. Likewise, when one or the other of the parents is the victim of some mental or physical condition which experience has shown to be hereditary, it should be possible to give instruction in contraception. The public will get such information from some source. If we as a group of scientifically trained men do not give it someone else will. Already the handling of this subject is mostly in non-medical hands with the result that there is very considerable injury to the health of the public and serious abuse whether we like it or not. The instruction of men and women in these matters is our responsibility. It will be much better if we accept that responsibility than if we allow it to be turned over to commercialists, charlatans, and busy bodies.

Anyone who has the opportunity to observe life must realize that a great amount of suffering and distress comes as a result of the misunderstanding of the subject of sex. Vast numbers of people are spending their lives unhappily because of an ignorance concerning this subject. It is well known that a large percentage of divorces is due to sexual maladjustments. Young people are being permitted to assume dangerous relations, marital infidelity, illegitimacy, sexual promiscuity and sexual perversion are the direct result of the improper understanding of the fundamental principles and nature of sex. It is up to the medical profession to attempt to unravel some of the tangles and snarls, and even more to exert every possible influence toward setting the layman right on all of these matters which are essentially biological and therefore a proper field for medical direction. It is up to us probably more than to any other group to teach the public that sex is essentially proper, natural, absolutely indispensable, and that it is beautiful and not ignoble. We have quite too long tried to purify the stream of life by improving its banks. It is time that we were starting at the source of it—which is sex. It is now possible for the public to get safe information on this subject, and every physician

should have in mind books, pamphlets, and other sources of information to which he can refer his clientele. Likewise, he should be able to give instruction in this subject whenever occasion demands.

#### CHILD WELFARE

Perhaps the most striking change in public health work that has come about since the beginning of the present century is the change in the care of children. The results have been a tremendous improvement in the health of this group. It is hardly necessary that we urge the continuation of this work inasmuch as every individual here is undoubtedly completely sold on a sensible program of this kind. We feel that it is evident, however, that in some cases such work is carried to extremes. We have in mind a mother who is so impressed with such work that she spends practically all of her time fussing with her four-year-old child. As far as this mother knows this child has never come in contact with a germ. The child has never been permitted to play on the floor; she has been dressed with heavy cuffs so that she could not put anything into her mouth, and at the age of four is just beginning to feed herself. This mother has been heard to say that she thinks it is better to raise one child correctly than to bring up several children like so many waifs. Already the child is definitely neurotic, pale, thin and tremendously bored with the technique of living. Among my personal acquaintances I do not know of an unhealthier child. Its temperature is taken every day, its weight is recorded, it sees a physician once a week and has already been treated for a long string of ailments, most of which undoubtedly originated in the mind of the mother. Certainly there is no more important work than the proper care of children, and certainly for that reason it is important that such a vital matter should not be carried to a ridiculous extreme.

Closely related to the matter of child welfare is that which has to do with immunization. So much stress has been put on this phase of the work that the matter need be no more than mentioned. The public should be taught by every reasonable means that it is unnecessary to suffer from certain infectious diseases. Diphtheria, smallpox, and typhoid fever are strictly preventable. Every one of these diseases has in times past been a terrible scourge. Progress has been made in the prevention of other diseases by immunization methods.

The interest and the welfare of the child has in many instances overshadowed the necessity of looking after the adult. For many years the American Medical Association has advocated the periodic health examination for all persons, or more particularly for those who are above forty years of age. This is a great field of work that has hardly been touched, and is a potential source of revenue for the profession and of useful serv-

ice to the layman. It is unfortunate, of course, that those who need the examinations most will be the last to go, and those who had better forget their health will be running to the doctor two or three times a year to have the pulse counted and the blood pressure taken. There is no doubt whatever that examinations of this sort are often given in the wrong spirit. Physicians are ordinarily looking for evidence of disease rather than for signs of health. We have known of some instances in which the physician felt that he should apologize when he examined an individual and found nothing wrong with him. If periodic health examinations are to be successful it is going to be necessary to make them as little morbid as possible. It is a serious matter to take an apparently healthy, happy person into the office, give him a physical examination and send him out frightened and discouraged. Periodic health examinations are capable of a great deal of good, but they must not compel an individual unnecessarily to spend the rest of his life in second gear. Anyway it is not the purpose of these examinations so much to prolong life as it is to insure happiness and efficiency. Speaking personally, I am very much more concerned in being able to live comfortably and do the things I want to do than I am in being able to tear a large number of pages from the calendar. Physical examinations which would take a man out of active life for twenty years and put him on the shelf for forty years are a positive menace to the whole purpose of the health program.

Most of this paper has so far dealt with the things which pertain to the individual himself, and as such may be properly classed as hygiene. There are, however, a great many community relations which it is necessary that the public understand. The layman must appreciate the necessity of having clean water to drink, clean milk and clean food to eat, of having a proper disposal of sewage and garbage, of having a clean environment about us with sunshine and good air; he must know the desirability of eradicating smoke, noise, public nuisances of all sorts which make it impossible for him to enjoy the legitimate use of life and property. Likewise, he should be reminded of the necessity of proper recreational facilities, the need of games for adults and children, the need of adequate homes, decent theatres and movie houses, and the value of schools that are safe from the standpoint of mental and physical health.

#### PUBLIC AND PHYSICIAN

Most of all, in my opinion, is needed a better relation between the public and the physician. For one reason or another the medical profession has lost in a considerable measure the fine confidence of the public which our professional forebearers apparently enjoyed. The public admires, in most instances, the accomplishments of medicine, but too often distrusts the motives of the physician. Many people apparently believe that a large percentage



of doctors are interested only in the fee. We know that that is not true, except in a few instances. How can we convince the public that it is not true? Beyond doubt the investigation made by the Committee on the Cost of Medical Care was actuated in a considerable measure by this attitude. The majority report of the committee clearly indicated that the layman thinks that he understands this situation and that his welfare demands that he take the control of these matters out of the hands of the physician.

We are largely responsible for this state of affairs. We have not taken the public along with us. In spite of the fact that it is they who pay the bills; it is their health which is concerned; it is their bodies on which we operate; it is their wives, husbands and children, their fathers and mothers, their brothers and sisters and friends whose lives we are manipulating; we have sometimes taken the position that it was none of their business. Fifty years ago a physician drove a horse and buggy at a very low cost. He maintained a one-room office; he had no telephone or office girl; he was not a member of half a dozen societies with high fees; the drugs he gave were chemical substances or vegetable products which were quite cheap; he needed no expensive equipment or instruments. When he came to the bedside he felt the pulse, looked at the tongue, inquired about the bowels, took the temperature, and made such an examination as his eyes, ears and fingers would permit. Under the circumstances, of course, his fee was small. Modern medicine, however, demands a far more elaborate set-up. The patient must pay for x-rays, blood examinations, metabolism tests, and half a dozen other expensive things which are mighty important and worth while—but does the public know that they are important and worth while? That is the point. These matters are not merely of interest to us alone. The reasons for them need to be explained. It must be pointed out that whereas modern medical procedures cost much more they are also worth much more.

A physician will need to remember that every surgical operation is done on a layman's diagnosis. We have in mind a child suffering from mastoiditis. Late in the disease the child was taken to a physician who prescribed an immediate operation. The operation was not done. Another physician was consulted and again an operation was prescribed. The operation was not done. Six different physicians made the same diagnosis, recommended the same treatment, but the layman father, holding the power of life and death of the child, decided against the operation. Finally he found a chiropractor who was willing to treat the case without an operation. The father permitted him to do so and the child died. In other words, it was a layman's diagnosis and it was a layman's judgment that made the decision. Children's tonsils are removed when the layman is convinced

that they need to be removed. Diphtheria immunization is done when a layman not only consents but agrees to pay for the same. In case of diabetes the victim is treated with insulin instead of hocus-pocus only when a layman is convinced that insulin is better. The patient with pernicious anemia is properly treated only when a layman agrees to swallow liver extract. Blood transfusions are given when a layman is convinced that it is safe to be a donor, and another layman is convinced that blood is what he needs. And so it is with everything we do. We must not only have the consent but also the active cooperation of the layman. The layman pays the taxes supporting the medical school in which we were educated; the layman grants to us the special rights and privileges which we as physicians enjoy; the layman shows us the respect which members of the profession usually demand; we exist for the sake of the layman. There is no need that we point out every detail of the technique of a surgical operation to him, but he does have the right to know in a general way what our objective is and where we are going and why. He ought to know when to send for a doctor; he ought to have some criteria by which he may judge for which doctor he shall send. Having gotten the doctor, he should have such an understanding of diseases and such an appreciation of the functions and limitations of the medical men that he will be able to give intelligent cooperation to the physician. This, in general, is the program of popular medical education.

Finally and emphatically we must insist that any successful public health program must use the local medical profession. Under no circumstances must the teacher of public health undermine the confidence of the public in its physicians.

## THE EARLY DAYS OF THE FLOWER MISSION TRAINING SCHOOL\*

WILLIAM N. WISHARD, M. D.  
INDIANAPOLIS

A hospital without a training school is unthinkable these days, but this was not always so. In the Indianapolis City Hospital prior to September 1, 1883, so-called "experienced nurses" were employed.

When I assumed the superintendency of the Indianapolis City Hospital, July 1, 1879, there was no other general hospital in Indiana. At that time it had a capacity of about 50 beds, and when crowded 60 beds could be utilized. The hospital buildings then consisted of an old brick building, erected through the influence and vision of the late Dr. Livingston Dunlap, and in addition some frame cantonments, the latter being somewhat like those

\* Presented at the 50th anniversary meeting of the Indianapolis City Hospital and Flower Mission Training School for Nurses, Sept. 1, 1933.

constructed by the government at Fort Benjamin Harrison during the World War. The four-story brick building, erected about 1858, was made possible because a member of the legislature contracted smallpox and died at one of our hotels. Dr. Dunlap used this opportunity to emphasize the need for a hospital. When the smallpox scare subsided, the city council refused to appropriate money to open and maintain the hospital, and it was not used until the Civil War. There was much complaint because Dr. Dunlap had secured \$25,000 to erect the building which the councilmen called "Dunlap's Folly." It was not used as a city hospital until 1866. The first superintendent was the late Dr. G. V. Woolen. The frame buildings, added and used by the government during the Civil War, were retained and utilized as part of the City Hospital. It was opened as a city hospital July 1, 1866. (Holloway's History of Indianapolis.)



Indianapolis City Hospital (South Front), 1883

"Dr. Livingston Dunlap (the third physician to locate in Indianapolis) came from the State of New York in July, 1821. He and Dr. Mitchell formed a medical partnership, the first medical firm in the city. Dr. Dunlap ranked high as a physician and surgeon. He was in especial demand as a consultant. He was councilman from his ward at one time. He was physician of the Deaf and Dumb Institution for several years, and was postmaster of Indianapolis from 1845 to 1849. He was elected Professor of Theory and Practice in 1849, at the organization of the first medical college in Indianapolis. He practiced in the city for 41 years, and at the time of his death was the senior physician. He was the first permanent President of the State Medical Convention, presiding at the session of 1849." (Medical History of Indiana, Kemper, page 31.) Dr. Dunlap was born in Cherry Valley, New York, December 3, 1799, and died in Indianapolis, September 10, 1862.

The condition of the hospital buildings in 1879, when I became superintendent, was deplorable. The facilities for caring for patients were very limited. There was but one bath tub in the entire hospital, and hot water had to be carried to it from a large boiler attached to the kitchen range. In a short time the water supply was improved somewhat by the installation of a large tank on the upper floor of the old brick building, into which water was pumped by a windmill from a deep-driven well. Additional bath tubs were installed, using the water

supply from the large tank. The nearest water and gas mains were several squares away.

The first night I served in the hospital as superintendent a coal oil lamp exploded in the hall, much to my pleasure, as it gave me an opportunity to urge the extension of gas mains to the hospital. Gas and water mains were soon secured and added greatly to the facilities of the hospital. Electrical lighting was unknown in those days. The nearest mule-drawn street car was a mile away and there was not a modern paved street in Indianapolis.

My salary as superintendent for the first year was \$600, or \$50 per month, but was increased afterward to \$800, and subsequently to \$1,000 per year. Small as such compensation may now seem, I felt amply repaid in the privileges the position offered me for enlarged professional opportunities as well as personal experience and improvement.

A year or two after I became superintendent of the City Hospital I instituted efforts for the erection of a new building. A few of our prominent physicians objected seriously to the erection of the hospital on the original site, claiming that it was too far out of town and that the low, swampy land north of the hospital grounds made it an unhealthy and undesirable location. There were two answers to these objections, one of which was that it would be almost impossible to obtain sufficient ground downtown on which to erect a hospital, and the other answer was that the city would grow in the direction of the hospital where ample space was then afforded.

In the spring of 1883 I was able to secure an appropriation for the east wing of the three buildings provided for in the architect's plans. The middle and west wings were erected in 1884 and 1885. The cornerstone was laid for the new east wing in April, 1883, and at my request Dr. John Dunlap, the son of the original founder of the hospital, performed this act. An interesting historical address was delivered by the late Dr. John M. Kitchen. This wing was completed and joined to the old building during the summer of 1883 and was ready for occupancy shortly before the Flower Mission Training School for Nurses was established.

In the spring of 1883 I was invited by the late Rev. Oscar C. McCulloch to attend a meeting of representatives of the Flower Mission at old Plymouth Congregational Church, then located where the north part of the present English Hotel now stands. It was explained to me that the women present desired to establish a Flower Mission Hospital for women and children and that they had some \$12,000 available, which amount they hoped to increase and build a small hospital for the purpose mentioned. They inquired if I would train young women as nurses for the proposed hospital and utilize their services at the expense of the Flower Mission until the nurses were sufficiently trained to be transferred to their contemplated hospital. I told them I would be glad to do so, but ad-



vised that they consider the expense of erecting and maintaining a new hospital, indicating to them that the erection of a small hospital would absorb the amount they had and that the annual overhead expense would be very heavy. The ladies narrated their observation of the work of trained nurses at Bellevue Hospital in New York, which institution they had recently visited. I asked them if it would not be better to establish a training school for nurses in the City Hospital to be known as the Flower Mission Training School for Nurses, and if in the future they had sufficient money to establish a hospital for women and children they would have the advantage of the training school connected with the City Hospital to supply nurses for the new hospital. I assured them of my cordial support and told them I thought I could secure the approval of the hospital trustees and City Council for such an arrangement. Dr. McCulloch thought well of the suggestion and the ladies expressed their pleasure in adopting it.

The chief problem was the financial support of the training school. It was proposed, first, that the Flower Mission would pay all expenses, except the amount then being paid to nurses employed by the hospital. This was an insignificant sum, as the two "experienced" nurses in charge at that time were receiving \$18 per month each. I expressed the belief that we might secure a little more, and the hospital board agreed to pay \$75 per month. A two-story house on West New York Street, a few doors west of West Street, was rented by the Flower Mission and a horse and spring wagon were purchased with which the nurses were conveyed from this home to the hospital twice a day—the day nurses coming over early in the morning and the night nurses in the evening. Their period of service was twelve hours each day, and the resident physicians in the hospital were subject to calls twenty-four hours each day.

A few months after the opening of the training school the bank in which the Flower Mission funds were deposited failed and its money was lost. The sum paid by the city (\$75 per month) was entirely inadequate to support the school, and with the assistance of prominent citizens permission of the City Council was secured to pay \$200 per month. Living quarters were provided the nurses by the use of the ground floor in the new east wing of the City Hospital. The removal of the residence of the training school to the City Hospital occurred, I believe, in the spring or summer of 1884, and the training school has been a fixed part of the hospital since 1883. In the autumn of 1896 the city took charge of the training school and it was then separated from the Flower Mission.

It has been erroneously stated that a small one-story building erected on the north end of the hospital grounds was the original home of the Flower Mission Training School. I was superintendent of the City Hospital for three and a half years after the training school was established and the build-

ing referred to was erected several years after I left the hospital. It was used only as a quarantine building for contagious diseases. The nurses never occupied it as a home.



Indianapolis City Hospital (Rear View), 1885

The women representing the Flower Mission at that memorable conference at old Plymouth Church, more than half a century ago, were leaders of that organization who devotedly and unselfishly gave their time and service during the period the training school was under their control. Among those present were Mrs. Hannah G. Chapman, Chairman; Mrs. J. H. Stewart, Mrs. Theodore P. Haughey, Mrs. Julia H. Goodhart, Miss Mary Rariden, Mrs. R. R. Parker, with two or three others whose names I do not recall. All of them have passed away, but their work lives on.

The training school was formally opened September 1, 1883. Miss A. A. Traver, a graduate nurse of Bellevue Hospital Training School, New York City, was installed as superintendent. She was efficient and thoroughly versed in training school work. On the first day we had one pupil, Miss M. E. Iddings who graduated with the first class two years later. However, student nurses began to arrive in a few days and their white caps and aprons, striped dresses, and bright faces gave a fresh and more cheerful aspect to the erstwhile somber wards of the hospital.

It is difficult to describe the relief which their conscientious, capable, and intelligent assistance gave. Their care of patients and accurate records were an inspiration to patients as well as doctors. About November 1, 1883, Miss Richards and Miss Crosby, both graduates of the Bellevue Training School, came as assistants to Miss Traver. Miss Dryer, another Bellevue graduate, replaced Miss Crosby in a few weeks, when the latter resigned and returned east.

I visited many of the hospitals in the Middle West during my superintendency and was unable to learn of but one city where a training school had been established prior to this one. That was in Chicago in connection with the Cook County Hospital and the Presbyterian Hospital, known, I believe, as the Illinois Training School for Nurses, which served these hospitals jointly. This indicates that our training school was the second west of the Alleghany Mountains and in the Middle West connected with a general hospital.

The course of training at that time was two years, and the entrance requirements were not so rigid as at present. However, a group of well educated young women constituted the personnel of the first class, graduated in 1885.

Miss Traver resigned as superintendent within a year after her appointment and was succeeded by Miss Hunt, who a few years later became Mrs. Peter F. Bryce, of Indianapolis, and is remembered affectionately by the older nurses as "Mother Bryce." It is a notable fact that the first and second classes graduating from the Flower Mission Training School exerted a wide educational influence in nursing in other cities. It was during Miss Hunt's administration that this influence of our training school was chiefly exerted in connection with other hospitals. We sent graduate nurses to St. Louis, Louisville, Ky., Springfield, Ohio, and other cities to help organize training schools. One of the graduates was also sent to Denver, Colo., and two to Los Angeles, who afterwards went to Honolulu to organize a training school. One of the members of the first class became a foreign missionary. Miss Carrie Bell, a former member of old Mayflower Congregational Church of this city, went as a missionary nurse to the Isle of Ceylon and became a martyr in that far-off station, where she died from cholera.

#### INFLUENCE OF TRAINING SCHOOLS

The introduction of training schools for nurses has exerted a great influence in the development of hospitals in Indiana as elsewhere. While a few cities in this state established city hospitals in the late eighties the number was small, and training schools were not connected with them at first. The value of trained nurses soon became apparent, however, and greater interest in hospitals developed. It may be added that there was no general state hospital in Indiana for medical and surgical cases until 1914, when the late Dr. Robert W. Long very generously made a bequest to the Indiana University School of Medicine for that purpose, which resulted in the building of the Robert W. Long Hospital, located in this city. In 1924 the James Whitcomb Riley Hospital for Children was added, followed in 1927 by the W. H. Coleman Hospital for the Diseases of Women and Children, thus creating a conspicuous group of hospitals. With the City Hospital nearby a notable medical center has been established.

It is of especial interest to me to know that my father, Dr. W. H. Wishard, made the first formal effort to obtain a general state hospital by introducing a resolution in the Indiana State Medical Association meeting held in Indianapolis, May 19, 1868, which called for the appointment of a committee by the Association to memorialize the General Assembly of the state at its next session to make an appropriation for the establishment of a state hospital for general and surgical cases. The motion met some opposition, and one of the objectors stated that "each township physician, who

as he chooses, can call in an assistant, and in operations of any importance the very best medical skill could be had." However, the motion was passed and Dr. John S. Bobbs was made chairman of the committee. It was he who put Indianapolis permanently on the surgical map of the world by doing the first operation for gall stones in 1867. His unfortunate death a year or two later ended the matter for the time being, but the seed was sown and interest in hospitals continued to develop after 1868.

#### STATE AID

The need for hospitals was so generally recognized a few years ago that the Legislature of this state authorized the establishment of county hospitals. The following figures show a summary of Indiana hospitals reported in the last edition of the directory of the American Medical Association to be 139 general medical and surgical hospitals, including state, county, city, private, denominational and tuberculosis hospitals containing 11,874 beds. There is a marked contrast between the hospital service of 50 beds, and only 29 patients, when I became superintendent of the Indianapolis City Hospital on July 1, 1879, and the 11,874 beds now available for the sick and injured in Indiana. In addition it may be said that there are 10,646 beds in the state hospitals for mental and nervous diseases, making a total of 22,520 hospital beds in Indiana.

#### LICENSING OF NURSES

The Indiana Legislature, in 1905, passed a law establishing a State Board of Registration and Examination for Nurses, which requires all graduate nurses to pass a rigid examination before being licensed so that no one is permitted to represent herself as a trained nurse who does not possess a state license.

Objection has been made because of the great increase in cost by trained nurses employed in private practice. One of the best known surgeons in the United States, in discussing the matter, said that trained nurses were not necessary in all cases, that the expense was very great, and he wished we had more "Ford nurses."

However, it should be remembered that educational requirements of a higher order are now necessary for entrance into a training school, and three years of training and study are required before graduation. Afterwards, a nurse must pass a state examination before receiving her license. They are educated and qualified as trained nurses, have a professional status which is legally recognized, and are licensed after a state board examination. Trained nurses are now members of a legalized profession.

It has been my privilege to have had an intimate acquaintance with the work of this training school since its inception. In suggesting the establishment of a regular training school in connection with the City Hospital, in preference to



giving temporary training to nurses for the proposed hospital for women and children, I was influenced chiefly by the deplorable need then existing for a more intelligent and higher quality of service in the Indianapolis City Hospital. The splendid group of women who had in mind the hospital for women and children cordially endorsed the suggestion, and without their sympathetic and enthusiastic initiative and support the undertaking would have been impossible at that time. To them the credit is due.

I trust I may be pardoned for saying again in closing that it is a great pleasure to me to recall that my father made the first formal effort to secure the establishment of a general state hospital in Indiana for medical and surgical cases, and that I was privileged to secure the erection in Indiana of the first, at that time, up-to-date general hospital for the city of Indianapolis with a capacity of 125 beds.

The completion of the new hospital and the establishment of the training school for nurses received the enthusiastic approval of the medical profession and the public, and on the evening of December 31, 1886, at the close of my service, I was the appreciative recipient of a dinner and testimonial on the part of the medical profession of the city and state.

#### STATISTICS

I am glad to present a few statistics of the training schools for nurses in Indiana, but they do not show the total number graduated since the establishment of the Flower Mission Training School, which is the "mother" of them all. I was told this afternoon that the Nurses' State Board, since the enactment of the nurses' registration law, in 1905, had licensed 9,050 nurses, and that there are 29 training schools in Indiana. This does not include all those who graduated between 1883 and 1905. In the twenty-two years' interval between 1883 and 1905 hundreds of trained nurses had been in practice in this state. In the present year 560 nurses have been admitted to Indiana training schools and 556 nurses have graduated. All schools of nursing in the state now require four years of high school for matriculation. More attention is paid to the health of the applicants and a physician's certificate is required. In addition to a state board of examination and registration to pass upon the qualifications of applications for license the nurses show a progressive educational spirit in holding an annual state convention for the discussion of topics of interest. This meeting is in addition to district and local organization meetings.

#### ABSTRACTS

##### SURGICAL TREATMENT OF INTRACTABLE PAIN

LOYAL DAVIS, Chicago (*Journal A. M. A.*, Dec. 16, 1933), states that visceral afferent painful impulses travel by way of the splanchnic nerves to the spinal cord and thence upward by relays of short neurons in the gray matter. Chordotomy, unless the lesion is deep and injures the gray matter, will not relieve visceral pain, although it will abolish intractable somatic pain. Posterior root section operations, in which a sufficiently large number of roots are severed, will abolish visceral pain. The pain of angina pectoris has been abolished by posterior root section. Such an operation definitely attacks the afferent pathway for the painful impulses and does not interfere with the cardiac accelerator mechanism. The stimulation of efferent sympathetic fibers produces changes in the periphery, which in turn stimulate the ordinary somatic afferent fibers that transmit pain. The relief of pain by section of sympathetic fibers is, therefore, based on the interruption of efferent pathways. Section of all the posterior roots that supply the upper extremity in man and in animals interrupts all form of superficial or deep sensation. There is no evidence of a sensory pathway through the anterior spinal roots.

##### URINARY TRACT INFECTIONS ASSOCIATED WITH PREGNANCY: THEIR FATE IN SUCCEEDING PREGNANCIES

E. GRANVILLE CRABTREE and GEORGE C. PRATHER, Boston (*Journal A. M. A.*, Dec. 16, 1933), present a study of more than 400 cases of disease of the urinary tract associated with pregnancy, which have been treated by one or both of them over a period of years, extending from 1919 to the present time. Many of these patients were seen in but a single pregnancy; others have been regular patients at their clinic, and they have been able to compile data covering the complete child-bearing period in a considerable group. Unfortunately, owing to various handicaps that existed in former years, the earlier observations are less complete than those made in later years. Careful selections have been made from these cases, and the authors have used only proved facts, suffering the necessary shrinkage in numbers in the interest of greater accuracy. They discuss the following points as they pertain to urinary tract infections associated with pregnancy; pre-existing infections, cure in pregnancy, persistent infections from previous pregnancies, the relation of cure and the absence of infection in subsequent pregnancies, the relation of infected pregnancies in a series of pregnancies, afebrile infections, and the association of gross renal pathologic changes with infections of the urinary tract in pregnancy.

##### UNUSUAL EXPERIENCE WITH AMEBIC DYSENTERY IN AN AVERAGE HOSPITAL OF A NORTHERN STATE: REPORT OF NINE CASES ORIGINATING IN CHICAGO

KANO IKEDA, St. Paul (*Journal A. M. A.*, Dec. 16, 1933), observed nine cases of amebic dysentery within a period of forty-seven days in a general hospital of an average size. Infection in all nine cases was definitely traced to Chicago, which demonstrates a widespread dissemination of this disease throughout the country as a direct result of the Chicago epidemic. The presenting symptoms show a wide variation, depending on the character of the attack and on the stage of the disease. The initial symptoms, when elicited, are not always identical. There are atypical cases in which the first symptoms may be misleading or so insignificant and commonplace that no medical relief is considered necessary by the patient. There is danger of a false positive report in the laboratory diagnosis of this disease by the inexperienced. Careful and painstaking search for the organism should be undertaken in suspected and neglected cases. Roentgen examination may be of value as an aid in differential diagnosis. Amebas were demonstrated in a section of a piece of tissue from the rectum, in a case suggesting a malignant growth. The histologic appearance of the lesion presents the characteristic initial changes due to the invasion of *Endamoeba histolytica*.

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JANUARY, 1934

## EDITORIALS

### EMPLOYMENT EXAMINATIONS

For many years most of our railroads have been meticulously careful in the matter of new employees; they have had them go through most careful physical examinations by the company physicians, particular attention being given to vision, color sense, and hearing. Such examinations are, of course, vitally necessary because of the fact that many of these men are to be engaged in positions in which the very lives of the patrons of the railroad are at stake.

More recently several of the larger transportation systems have inaugurated the periodical examination plan, in which all engaged in operating service are checked each year or two. Such a plan has been found most satisfactory in that it very commonly results in revealing defects, remediable or otherwise, that would, in time, be potential trouble makers.

In the larger industrial plants in former times physical examinations were usually of the casual sort; the fact that an applicant seemed possessed of the normal number of arms and legs, that he had at least a moderate degree of intelligence, and looked as though he might be able to produce, seemed about all that was necessary. Nowadays all is changed; applicants for employment, as well as those already employed, are being subjected to thorough physical examinations, and those found to have defects of more than a slight character are advised to have the same corrected at once. In fact, in most instances remedial agents are at once sought or the employe is without a job. This is becoming especially true in the matter of vision, hernia, various degrees of loss of joint mobility, etc.

Just what has brought this about is a question, though we have a notion that the compensation acts of the various states have had much to do with it. Certain it is that employers have paid, and paid dearly, for compensable cases that would have been avoided had a pre-employment examination been made. We recall a rather large settlement of a claim for the loss of vision in an eye, when all concerned, except the employe, were morally certain that the condition existed long before the alleged accident, which was of a most trivial character.

But there is another side to the story—what of the applicant for employment, or the employe already engaged, who cannot pass the physical examination required; where shall he turn for employment once the plan becomes general? Only recently we saw a young man, married, who for some years had been gainfully employed by a large corporation; because of visual errors he was unable to pass the examination, and it was not possible to bring his vision to anywhere near the normal because of an extremely high compound hyperopic error. When we announced the result of the examination the young man was in a veritable panic; he knew not where to turn for employment when such openings are as rare as they have been for the past few years. His wife at once announced that she would immediately enter a business training school that she might take care of the situation.

In our judgment this is fast becoming one of the major problems in industrial economics; some solution must be had and some means of employment must be found for these people—they are more than numerous, they may be said to be legion. Whether our state industrial boards should handle the situation we do not know, but something must be done lest these unfortunates become public charges. It becomes one of the duties of the state to find some means by which these men may find remunerative employment.

### MILES FULLER PORTER

"He has achieved success who has lived well, laughed often and loved much; who has gained the respect of intelligent men and the love of little children; who has filled his niche and accomplished his task; who has left the world better than he found it, whether by an improved poppy, a perfect poem, or a rescued soul; who has never lacked appreciation of earth's beauty, or failed to express it; who has always looked for the best in others and given the best he had; whose life was an inspiration; whose memory a benediction."—Bessie A. Stanley.

The above might well have been written of Doctor Miles Fuller Porter, of Fort Wayne, whose death occurred December sixth. In his passing, the Indiana State Medical Association loses one of its most consistent and ardent supporters. For a period much longer than most of us can remember, Dr. Porter was recognized as one of the "wheel-



horses" in any worthwhile movement pertaining to the healing art. He was a natural leader because of his ability to impress those with whom he came in contact with the fact that he was utterly sincere and earnest in whatever he set out to do.

For many years the writer has sat with a committee of which Dr. Porter was chairman since its inception. This committee had to do with intimate discussions of various medical men, applicants for admission into one of our national organizations. For some years we sat with him in the Council of our Association, and at divers other times we have met him in official and semi-official capacities. Long have we marveled at the capacity of the man, not only for the vast amount of organization work he did, but because of his faculty of seeming, intuitively, to know the right thing to do at the right moment.

In his home city where he had practiced for more than a half century, Dr. Porter was universally beloved. The Fort Wayne press was of one accord in extolling the virtues of the man, not in a eulogistic manner, but with a simple recital of the civic attainments of a man who had done things and done them well. Even the funeral rites were typical of the man for whom they were said—brief, simple, and entirely without ostentation—just as Doctor Porter had lived, doing things as he thought best, without a thought as to personal reward, nor with a view to favorable publicity for himself.

At the recent session of our Association in French Lick, the writer frequently heard members remark that it did not seem like old times, not to see Doctor Porter present. He will be sorely missed, not only by his home-town confreres, not only by the medical profession of Indiana, but by his friends and neighbors who knew him best. In our House of Delegates, we will note his absence with keen regret, for he was always present and with an eye to the best interests of the Association, his counsel was found to be of the best. While he occasionally indulged somewhat in the art of medical politics, and occasionally sponsored the election of some candidate or other, he always was a square shooter; the whole House knew where he stood and why.

Many of us who knew him perhaps more intimately knew of his ideals in the practice of the healing art, and we can recall the continuous fight he made against fee splitting. We are reminded of his interest in the early recognition of and management of cancer—scores of incidents might be cited as to his various activities. As we have said, he will be sorely missed, but his memory will be lasting to the hosts who knew him.

#### COMMITTEES FOR 1934

IN accordance with general recommendations made by Dr. Weinstein that the number of committees be somewhat reduced, four committees, whose work has been completed and reports made before the House of Delegates, have been discon-

tinued for the coming year. Committees discontinued are the Registration Committee, Committee on Business Instructional Course, Committee on Special Medical Defense Fund, and Special Committee on Medical Care of the Indigent. The information gained by the Registration Committee will be passed on to the Legislative Committee. The establishment of business instructional courses in the Indiana University School of Medicine and the adoption of a resolution by the American Medical Association recommending that such courses as have been initiated at the Indiana University be adopted and added to the curriculums of all medical colleges, completed the work of that committee. A program of future business and instructional courses will be determined by the faculty of Indiana University. The data that was obtained by the Committee on Special Medical Defense Fund and the work of the Special Committee on Medical Care of the Indigent will be turned over to the Executive Committee. In accordance with the recommendation of the American Medical Association, a state committee on mental health has been appointed in Indiana for the new year. As a great many committees are making surveys and preparing data to aid in their work, a statistician has been appointed who will be available to assist any committee that may find it necessary to make a survey upon any subject they may have at hand.

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#### GROSS INCOME TAX REPORTS

More than 500,000 blanks on which Indiana individuals and businesses will make their annual gross income tax returns in January have been sent to hundreds of distribution points throughout the state.

Preparations for receiving more than 300,000 tax payments are being made at the State House. This large number of payments is anticipated because every taxpayer who owes the state must pay up in full in January. In July and October, when the first two payments were made, a taxpayer did not have to make settlement unless he owed \$10 or more.

C. A. Jackson, director of the gross income tax division, pointed out that a return must be filed and payment made by every person or business with receipts in excess of \$666.67 for the eight months from May 1, 1933, to December 31, 1933, inclusive. From the total receipts, the exemption of \$666.67, or two thirds of the annual exemption of \$1,000, will be deducted.

The annual return blanks require the taxpayer to include total receipts for the eight months, regardless of previous returns filed or payments made. If tax was paid in July or October, or both, space is provided on the blank for deducting the amount of the previous payment so that the sum due in January can be determined accurately.

It is obviously essential for every individual to become a business man to the extent of keeping accurate records of his receipts from all sources. This record must be preserved for two years as a protection to the taxpayer himself.

Another point in connection with the state gross income tax, of interest to physicians and surgeons who employ assistants and office help, is this: every person or business in Indiana that paid \$666.67 or more to any employee between May 1, 1933, and December 31, 1933, inclusive, will be required to report the payment to the state gross income tax division. Blanks for filing this information are available at automobile license bureaus. They must be filed by February 15. The rule applies to every employer, regardless of the number of his employees.

EDITORIAL NOTES

We extend to all our members and to the host of friends of THE JOURNAL the wish that 1934 may be a year of peace and plenty, which necessarily will bring contentment.

WALTER F. DONALDSON, M. D., secretary of the Pennsylvania State Medical Society, thus speaks of Morris Fishbein, in connection with his report of the recent annual meeting of that society: "Dr. Fishbein also addressed the Woman's Auxiliary. Like a true disciple of Aristotle, he was a peripatetic disseminator of intellectual pabulum." And Morris so dislikes being called names!

AN interesting decision of the California Court of Appeals was recently reported, concerning the divided responsibilities of operating surgeon and anesthetist. The decision is to the effect that a surgeon who is employed to conduct an operation in a hospital is not liable for the negligent acts of an anesthetist employed by the hospital. This sets at naught the notion generally held by physicians that the operating surgeon is responsible for all acts of all concerned with the operation.

NEW committee appointments are listed in this issue of THE JOURNAL. If you are appointed to a committee, please be advised that there is a year of work ahead and you must do your part. There are no paper committees; appointment to a committee will mean that time and effort must be expended. If any member has any suggestions or inquiries, send them to the headquarters office, from where they will be referred to the proper committee for attention and direct action.

DR. GEO. M. CRABB, addressing the eighty-second session of the Iowa State Medical Society, reminded his audience that the mortality rate for appendicitis can be reduced fifty per cent by a five-

year campaign of education. His plan involves two divisions—the State Medical Society and the students of the public schools, colleges and universities. He does not overlook the fact that we yet have physicians who need to be educated to the seriousness of abdominal pain and particularly the deadly danger of cathartics in such conditions. He declares that this program, carried out over a period of a few years, will unquestionably save many lives.

FROM a recent issue of *The New Yorker*: "We were flattered to receive a letter from the vice-president of the Charles H. Phillips Chemical Company asking us to please take two Milk of Magnesia tablets with a glass of water every morning when we get up and another thirty minutes before eating. This is a subtle compliment. We didn't realize that it was a subtle compliment till we waded through the letter and found that the research department of the anti-acid people had discovered that the 'high-income' class is the best market for magnesia pills, because acidity goes hand in hand with success. Well, the Phillips people can go climb a test-tube; we resent their assumption that we are anything but gloriously alkaline—simply because we happen to be fabulously wealthy." My, My! You don't suppose the Phillips Company is doing direct advertising!

A MEMBER sends us the following note which affords a most excellent argument in favor of prompt payment of one's annual dues: "Enclosed find check for \$10.00, 1934 dues. You will notice that I am on time. Last year I paid on March first; I rendered services on March twentieth that brought .....suit; rather Dr. .... and Dr. ....suit, as they were instigators. Twenty days more and I should have had no protection as the .....Co. crowded out from under. Yours, .....M. D." Nor is this the only such instance; right in the same county we have cases in which the doctor involved found himself without protection of any sort simply because he was delinquent. Better see your secretary before February first; an "ounce of prevention," you know!

A PHYSICIAN has called to our attention the fact that he has been paying a lump sum each month for his telephone service, without knowing what the amount covered. Upon investigation he found that he was charged, each month, for the following:

Unlimited service .....	\$13.50
Extension .....	1.50
Two push buzzers .....	.50
Extra cord .....	.10
Key .....	.15
Special listing .....	1.00
Total .....	\$16.75

The push buzzers and key had long since been removed, though he still paid a rental charge for



them as well as for a short length of cord. He did not know that he was paying for a "special" listing. Have you had your telephone statement itemized? It might be worth your while.

DR. R. B. ROTHROCK, member of the Indiana State Board of Pharmacy, writes entertainingly about "Prescribing and Dispensing Proprietary Preparations" in the December *Bulletin* of the Vanderburgh County Medical Society. He immediately attracts attention when he says that "the prescribing and compounding of medicines are rapidly becoming lost arts. Physicians today are largely dependent on manufacturers of proprietary preparations for information regarding remedial medicines." He then goes on to say that the medical profession has permitted materia medica to fall by the wayside; that our medical schools have curtailed the teaching of this subject until it is of little value. To all of this, we most heartily subscribe; a comparison of the prescriptions written today by the younger group with those coming from the older men will bear out this contention. The writer waxes epigrammatic when he says, "Thus we find that the proprietary medicines of today become the patent medicines of tomorrow."

A gentleman shrewd in approach, high-pressure in conversation, and shady in background, has been working the western part of Indiana, obtaining money to form a new insurance company. Several physicians, according to reports received at the headquarters office, have fallen, some to the extent of five hundred dollars. This could have been avoided had these physicians, when approached, gotten in touch with the headquarters office of the Indiana State Medical Association, as the record of this particular high-pressure salesman is on hand. Whenever any proposition of this sort is offered, the headquarters office should be notified and if any information is on hand in regard to the salesman, or the company he represents, it will be forwarded immediately. Many thousands of dollars are saved during the course of a year by physicians who follow this procedure of making an inquiry through the headquarters office before investing in propositions which are promoted by salesmen or agents who come to them without proper credentials.

THE action of the United States Compensation Commission (created in 1916) in hiring doctors to give medical service to those injured or suffering from occupational diseases while employed throughout Indiana by the Civil Works Administrations, brought the following prompt telegram and vigorous protest from the officers of the Indiana State Medical Association. Copies of the telegram were sent to President Roosevelt, to the Indiana senators, and to Dr. Olin West. "We, the officers of the Indiana State Medical Association, speaking for three thousand physicians in this state, vigorously

oppose the uncalled for action of the United States Compensation Commission in hiring federal doctors to give medical services to CWA employees. Such employment is against the principles of medical practice, destroys the intimate patient-physician relationship, takes away the right of the patient to select his own physician. This also upsets completely the program which has been worked out with our state relief commission in Indiana for the care of the needy sick under FERA regulations number seven. Such action on the part of the Commission should cease immediately as it is pernicious and a direct step of the government to establish state medicine. Suitable arrangements can be made for this service through each county medical society." The telegram was signed by the Executive Committee of the Indiana State Medical Association.

Mr. William Book, relief director for Indiana, also communicated with Washington, voicing the protests and the complaints of the medical profession against the action taken by the United States Compensation Commission. Upon December 23, 1934, Mr. Book received the following telegram from Washington: "Physicians designated by Commission in Form C A seventy-six to provide medical treatment where government facilities not available or adequate were not selected in connection with the CWA but for treatment of civil employees of the United States. The reference in Revised Rules and Regulations Number five of CWA intended to furnish names of physicians acquainted with Federal Compensation Law and regulations of this Commission and not intended to exclude others—reputable physicians—willing to give treatment at reasonable charges in accordance with paragraph six of Rules and Regulations number five. Notify local administrators at once they are authorized to advise local medical profession and organization accordingly and to make arrangements to permit reputable private physicians to participate in rendering this service on basis indicated. Regulations governing medical service require use of government medical officers and hospitals where available and properly and reasonably accessible. (Signed) United States Employees Compensation Commission." As THE JOURNAL goes to press, Mr. Book is issuing a bulletin, copies of which will be sent to county society secretaries, clarifying the relationship of the FERA and the CWA in receiving medical services rendered by Indiana physicians.

BUSHMAN, in the *Nebraska State Medical Journal* for November, 1933, discusses "Illumination and Headache." He mentions several cases of children having been referred to him, examination showing no refractive errors or muscle imbalance. He states that in these cases a careful checkup has shown the headache to be due to improper lighting conditions in the school and in the home. With the assistance of a lighting engineer he demonstrated several forms of lighting, apparently proving his

contention that the indirect system affords the most comfort to the eyes. He also showed the effects of glare by strong light, when reflected from highly glazed paper such as a printing surface; in particular, he referred to paper such as used in the *Archives of Ophthalmology*, averring that that Journal is hard to read for that reason. He also mentions the headache so commonly described as occurring after several hours at the card table, where there is a glare from the highly enameled cards. He does not neglect to pay his respects to the promiscuous use of "tinted" lenses, declaring that same should be used only when the patient has a marked photophobia or is continuously exposed to some form of glare. Incidentally, Bushman radically departs from the usual style of language in presenting papers; for example: "If you contract sharks want to improve your game, use an indirect light." We are very much inclined to agree with most of what he says for our experience is that headache is commonly due to improper lighting conditions. Only recently have we made the observation that teachers in our modern schools rather commonly complain of headache, traced directly to light strain, for as one teacher expressed it, "the modern system of school room lighting is designed for the pupil and not for the teacher."

WITH this issue of THE JOURNAL we are entering our second year in an editorial capacity. Whatever our accomplishments may have been in 1933, our readers may and probably have judged; what they may expect in 1934 is to be seen. We have spent no inconsiderable time in getting out the various numbers of THE JOURNAL; we have done a lot of reading; we have carefully studied other journals, that we might pick up all the information possible as to how they are carried on. We have had very generous support from our officials and from the general membership. The members of the Editorial Board have been of very great help, and have proved that the Council acted wisely when it established a Board. We have had more material offered than we had space to print and, at times, it may have appeared that we were arbitrary in some of our decisions. We are ever reminded that we are striving to please almost three thousand professional men—an impossible task, of course; but from the complaints we have had, we feel that we have made a fair job of that. There are numerous points to be considered in getting out a number of THE JOURNAL; for example, we must avoid using too many papers from one city, or even from one section of the state; we must be careful that John Smith or Bill Brown does not break into print too often; and more than anything else we must use due caution lest too many papers on a common subject occupy our pages. Withal, it has been a pleasurable task that has been ours, in 1933. We are looking forward with much anticipation to 1934, and we make a plea for the same generous support and for the same spirit with which you

have received our previous efforts. In return, we pledge a renewed and increased activity in behalf of our Association; we will make every endeavor to serve you well and to bring to you a publication of which you may feel proud.

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A LETTER from an Elkhart physician, together with a reply from Mr. William H. Book, may be helpful to Indiana physicians who are pondering similar questions.

"... recent developments in connection with NRA activities have raised a few questions which, it seems to me, should be considered before they are plunked down on our very doorstep. I refer specifically to the announcement of the press that many of the unemployed will be put to work on government projects, paid \$15 per week, and thus taken off the relief rolls. What disposition is to be made for medical relief for these families? I put this same question to the local federal relief administrator, and she informed me that this query was put a dozen times by various members attending the relief administration meeting in Indianapolis... and that no answer was forthcoming except that they would have to take care of themselves, as they would be off the federal rolls.

"From the standpoint of the physicians, all I can see is that this is going to put the burden right back on us, just where it was before federal relief stepped into the picture, for it is perfectly certain that no very extensive medical care can be paid for out of such a family income.

"Another point which wants a great deal of clearing up is where the line is to be drawn between those cases which should be taken care of by the federal relief authorities, and those to be provided for by the trustee. This question has proved to be the chief source of contention locally, and has led to no end of controversy in numerous cases.

"Perhaps you may have the impression that I am looking too far afield for trouble, but if, as I am told, the new plan will take about 600 families off the relief rolls in Elkhart, it means that just that many persons will have to be taken care of without anyone to provide for payment of the bill. It causes them to fall into that unclassified group for which neither federal relief nor trustee is responsible, and when the need for medical care arises, just where can the hospital and the physician expect to be paid?"

In reply Mr. Book writes: "I believe you are unduly fearful. I am inclined to think that most of the people who have the benefit of civil works employment will receive more income than they were accustomed to before their dependence on relief. These persons are to be removed from the relief rolls, and employment is not being limited to one person to a family. Likewise, these families are to receive the benefit of federal surplus food distribution until March first, which means increased income."



## THE PRESIDENT'S PAGE

Very interesting and enlightening has been the experience of those of us who have been privileged to pass this way during and since the World War. The struggles of that war are now legion, but not all the battles were fought at that time. Wonderful indeed have been the struggles since that time. Marvelous have been the changes that have come to us during the years since this strife at arms ended. We have seen our people and the people of other countries rise to heights of prosperity undreamed of, only to see them smitten by a depression or economic upheaval the like of which this old world had never known. It has been a common experience of mine, to stop and try to figure how we managed to come from where we were to where we are.

It is needless to say that during all these changes the medical profession could not, should not, and has not escaped. Indeed medicine has perhaps never gone through such a unique experience. As a result of this, and certainly hastened by the depression, many and varied have been our problems of the past few years.

### OUR PROBLEMS

To enumerate only a few, we have seen come and go the famous report of the Committee on the Costs of Medical Care. In this, organized medicine won a signal victory.

We have done our share in throttling those politicians who sought for personal gain to make a government ward of every man who wore a uniform, by offering him free hospitalization for non-service-connected disabilities.

We have adjusted ourselves to the new order in Indiana, occasioned by the new set-up of our state board of health. This to us is a great opportunity as the problem of medicine, now, both in prevention and cure, in so far as Indiana is concerned, is bodily handed over to the physicians of the state where it rightly belongs. In this we have succeeded in focusing the eyes of the nation on Indiana.

There has been a very gratifying response by the various county societies in the state. It is the purpose of the plan to make your county society the unit in all health activities. Many courses in the nature of post graduate work in preventive medicine have been given, and there has been a very enthusiastic response wherever these courses have been held. Any county society can put on such a course at its own volition. Speakers will be furnished only at the invitation of the local county society. The public is reached by speakers who must also have the endorsement of the society in that county in which such meeting is held.

### PUBLIC HEALTH

There has been organized a council of public health made up of both laymen and physicians whose purpose it is to contact various lay societies in the interests of public health.

Very gratifying indeed has been the response of almost all the county societies to the first efforts to work this plan in concrete form, namely, the campaign for immunization of the whole state against diphtheria and smallpox. As a result of this campaign, we may confidently expect a marked drop in the mortality from diphtheria during 1934, a result very much to be desired when we compare the death rate in our state with that in some of our neighboring states.

No review of our last year's work is complete without a reference to that most valuable of all our organizations, the association of county secretaries. This organization, made up of the key men of the county units, represents a working force whose influence is enormous. Their annual conference last year was probably the most valuable meeting of the year, and their plans are complete for a bigger and better meeting this year.

We have combated, to the best of our ability, numerous attempts of organizations and private individuals to break into the practice of medicine without the formality of securing a license. As a result of this, there has been generated a very wholesome respect for the rights as well as the strength of organized medicine. Probably never before in the history of organized medicine has the physician had such an opportunity to assume his rightful place as a citizen in his own community. We must not fail those who have made this situation possible.

Through all our trials, organized medicine has held a calm dignity backed up by a staunch faith in the future, which is the dower right only of those who work in a consciousness of right.

Out of this has come our slogan for the year 1934: "Whatever comes, strive to maintain that precious relation which gives the patient the right to call the physician of his choice."

Never in the history of our great state has the opportunity of the medical profession been so great; never has the responsibility been so great; and, to cheer us on, never has our organization been so good.

In the name of the Indiana State Medical Association, I greet each and every one of you, and wish for all a prosperous and happy New Year.

*E. E. Padgett*

## SECRETARIES' ANNUAL CONFERENCE

**Lincoln Hotel, Travertine Room, Indianapolis, Indiana, Sunday, January 21, 1934**

1:15 p.m. Registration, 14th floor, Lincoln Hotel.

1:45 p.m. Call to order and opening remarks by A. M. Mitchell, M. D., Terre Haute, chairman; President E. E. Padgett, M. D., Indianapolis; and President-elect Walter J. Leach, New Albany.

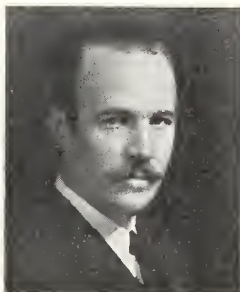
2:00 to 3:00 p.m. "A Statewide Program for Medical Care to Indigent Persons in Their Homes Based on Federal Emergency Relief Administration's Rules and Regulations No. 7 and Data Drawn from Two Years' Experience in New York State," H. JACKSON DAVIS, M. D., Consultant in Medical Care, F. E. R. A., Washington, D. C.

3:00 to 3:15 p.m. Discussion.

3:15 to 3:30 p.m. "Duties of the Profession in Health Education," W. W. BAUER, M. D., Director, Bureau of Health and Public Instruction, American Medical Association, Chicago, Ill.

3:30 to 3:45 p.m. Discussion.

3:45 to 4:05 p.m. "Your JOURNAL," E. M. Shanklin, M. D., Editor, THE JOURNAL of the Indiana State Medical Association, Hammond, Ind.



H. JACKSON DAVIS



W. W. BAUER



NATHAN B. VAN ETTEN



ALPHONSE M. SCHWITALA

### GENERAL DISCUSSION

4:05 to 4:20 p.m. Immunization and Child Health Program: Led by L. P. Harshman, M. D., secretary, Allen County Medical Society, Fort Wayne.

4:20 to 4:35 p.m. Federal Emergency Relief Act Funds: Led by J. C. Burkle, M. D., secretary, Tippecanoe County Medical Society, Lafayette.

4:35 to 5:00 p.m. General Activities of County Societies—

Large societies: Led by J. S. McBride, M. D., secretary, Marion County Medical Society, Indianapolis.

Small societies: Led by A. L. Spinning, secretary, Fountain-Warren County Medical Society, Covington.

Election of chairman for 1934.

### RECESS

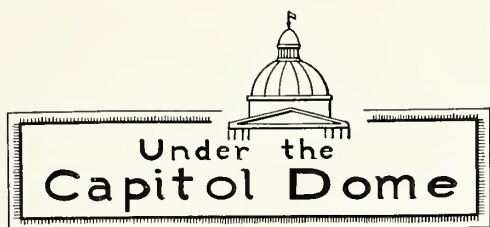
5:45 p.m. Dinner in Travertine Room, Lincoln Hotel.

"Medical Economics," NATHAN B. VAN ETEN, M. D., New York City, a signer of the Minority Report of the Committee on the Costs of Medical Care and Vice-Speaker of the House of Delegates of the American Medical Association.

"Business in the Practice of Medicine," ALPHONSE M. SCHWITALA, S. J., Ph. D., Dean, St. Louis University School of Medicine, St. Louis, Mo.

**SECRETARIES—OFFICERS—MEMBERS—All are invited and welcome to attend this meeting. Dinner will be free to secretaries; to others the charge will be one dollar per plate.**





Dr. J. W. Jackson is with the Indiana Division of Public Health as epidemiologist. Although only appointed in July, the numerous interesting duties



DR. J. W. JACKSON

of this position already have required visits to many parts of the state where many pleasant contacts with physicians and health officers have been made. The duties of this work include not only an epidemiological study of epidemics of infectious disease, but in addition various educational measures are especially stressed.

Such educational measures have included talks to groups of parent-teacher societies, to county institutes, medical societies and various organized and unorganized groups. Dr. Jackson has made a careful review of diphtheria immunization and the various methods of organizing for this work. He will be happy to assist any authorized organization in solving problems of organization or procedure in the work of immunization against diphtheria and vaccination against smallpox.

#### PRISON MEDICAL SERVICE

Medical service at the Indiana State Prison "is excellent at a routine level, but the staff has not yet been able to carry on an active preventive and corrective program because of the pressure of daily work . . ." according to a report of the Osborne Association, Inc., of New York (formerly the National Society of Penal Information, Inc.). Copy of their report on the state prison at Michigan City and the state reformatory at Pendleton has been received in Indianapolis.

If the hospital for the criminally insane at the prison had its own staff the prison physicians would be free to develop a well-rounded medical program, the report said. The hospital for the insane "falls far short of the standard set by similar hospitals in some of the more progressive states," the report said. It recommended a psychiatric staff on a full-time resident basis. "The facilities for tubercular prisoners are above the average of most prisons, but here again Indiana falls short of the best with respect to active treatment," the report said.

The report said that the hospital at the reformatory at Pendleton "from the point of view of

equipment and management, is among the best in the country." The present medical staff, however, is too small.

#### TREATMENT OF SYPHILITIC INDIGENTS

County, city, and town health officers have authority, under Indiana laws, to administer anti-syphilitic medical treatment to expectant mothers during the period of pregnancy, and the cost of the treatment is a valid claim against the various taxing units, according to an opinion issued by Philip Lutz, Jr., attorney general. The opinion was written for Dr. Verne K. Harvey, director of the State Division of Public Health. The opinion also held that it would be a valid claim against a taxing unit and the city, town, or county, as the case might be, for the health officers to defray the cost of anti-syphilitic medical treatments for indigent, congenital syphilitic patients of pre-school and school age.

The attorney general said in his opinion: "If, in the opinion of the health officials, the proper protection of the public health requires that persons infected with venereal diseases be given treatment to suppress and control the diseases, and to prevent their spread to others, it is certainly within their power to order the treatment given at the expense of the proper county, city, or town. This rule applies regardless of the age of the infected person, and it is done purely for the protection of the general public, without regard to the indigency of the person treated."

#### WHISKY REGULATIONS

Indiana's new whisky regulations practically nullify the use of prescriptions by physicians, in the opinion of Philip Lutz, Jr., attorney general. "There is practically no use for the doctors' prescriptions under the new regulations," the attorney general said.

Under the regulations issued by Paul P. Fry, state excise director, practically any person—habitual drunkards, minors, and inmates of institutions excepted—may purchase up to four quarts of whisky daily without a prescription. The purchase must be made at a licensed drug store and the purchaser must sign for his whisky. The excise department rules, however, provide for the purchase of whisky under prescription of a physician. The person buying the whisky need not appear personally when a prescription is presented, as in the case of purchase without prescription.

The attorney general said that he had been informed by a reliable source that approximately one-third of the prescriptions issued during the period when they were required for purchase of whisky were issued by physicians without charge.



Bodies of insane patients who die in the state's hospitals for the insane are to be buried at the expense of the counties from which they were committed, rather than turned over to the State Anatomical Board, according to an opinion issued by Philip Lutz, Jr., attorney general. The opinion was written for Dr. Richard Schillinger, superintendent of the Richmond State Hospital. Dr. Schillinger saw a possible conflict between two state laws relating to unclaimed bodies—a 1903 act provides for turning them over to the Anatomical Board, while a 1927 act provides that superintendents of hospitals for the insane shall bury the unclaimed bodies and charge the fee to the county from which the person had been committed. The attorney general held that the 1927 act applied to the hospitals for the insane, although the other act still is in force.

Use of 1933 automobile license plates will be illegal after January 1, according to Frank Finney, commissioner of automobile licenses. The plate sale this year began fifteen days early. The plates are manufactured at the Indiana State Prison at Michigan City.

DIPHtheria REPORT FOR NOVEMBER,  
1933

Diphtheria continues to take approximately one child for each school day during the month of November, there being twenty-three deaths during that month. This brings the total to 118 for the first eleven months of the year, and practically destroys our last hope of establishing a new low record. In other words, diphtheria remains a serious problem in Indiana, and the immunization campaign is being started not a bit too soon.

If a large number of children are immunized during the next few months, we should be in position to make a new low record next year, and even a better one for 1935. There is no reason why diphtheria deaths should not be cut to fifty or less for the entire year if the present immunization campaign is carried out with enthusiasm.

Below will be found an analysis of the deaths by counties for the first eleven months of 1933, and also for the month of November.

County	Total for 1933	October 1933
Adams .....	1	0
Allen .....	9	0
Bartholomew .....	6	1
Blackford .....	1	0

County	Total for 1933	October 1933
Clark .....	1	0
Daviess .....	2	0
Delaware .....	1	0
Dubois .....	1	0
Fayette .....	2	0
Floyd .....	1	0
Fountain .....	1	0
Fulton .....	2	1
Gibson .....	1	0
Grant .....	1	1
Greene .....	3	0
Hancock .....	2	0
Harrison .....	1	0
Hamilton .....	1	1
Howard .....	1	0
Jackson .....	4	0
Jennings .....	1	1
Knox .....	1	0
Kosciusko .....	1	1
Lake .....	2	0
Lawrence .....	3	1
Madison .....	1	0
Marion .....	12	2
Monroe .....	2	0
Morgan .....	1	0
Noble .....	1	0
Orange .....	1	0
Owen .....	1	0
Parke .....	1	0
Perry .....	1	1
Pike .....	2	1
Porter .....	1	1
Randolph .....	1	0
Ripley .....	2	0
Shelby .....	3	0
Starke .....	1	0
St. Joseph .....	1	0
Sullivan .....	5	1
Switzerland .....	1	0
Tippecanoe .....	7	2
Union .....	1	0
Vanderburgh .....	9	3
Vigo .....	5	3
Warren .....	1	0
Warrick .....	1	0
Wayne .....	5	2
Wells .....	1	0
	118	23

## SECRETARIES' COLUMN

## MEDICO-LEGAL DEPARTMENT



Mr. Secretary, "Roll Out of Bed With a Song" every day from now until Sunday, January twenty-first, 1934. On that day you should be at the Lincoln Hotel, Indianapolis, at two p. m., to hear about the things that are gnawing at your very livelihood in the practice of medicine.

The complete program appears on page 32 in this issue. Look it over carefully. The men on that program will give you the lowdown on the things that will or will not produce State Medicine. If you can not be at this meeting, send someone in your place. Presidents of county societies, councilors, officers and all physicians in the state are welcome to attend.

Every secretary should look up the plan that the New Jersey Medical Society is using for the care of the indigent sick. Also look up the Philadelphia Medical Society's plan against abuses of the medical profession. These things will help, so that you and your society can stay out of the hands of the politicians.

Would it not be a good idea to have several M. D.s in the next legislature and perhaps in Congress?

Would it not be encouraging to every secretary if all members of his society would attend the meetings of his society 100% and give every question that comes up full discussion? I'm afraid if this happened something would happen to the secretary. To be serious, every M. D. should begin to take an active part in the affairs of his society.

In New York State an insurance bill was introduced a few years ago; the New York State Medical Society defeated its passage. Do you know that in some states, group hospitalization is classed as insurance and comes under the insurance department of the state?

It is believed that the following questions, asked by an Indiana physician, and the answers thereto, may be of general interest.

1. In reporting rural accidents to county police or sheriff, particularly in road and traffic accidents, what is the duty of the doctor?

Answer: Burns 1929, Volume 4, Section 10142, requires that where accidents occur involving motor vehicles, they must be reported to a police station, peace officer or judicial officers whenever any person is killed or rendered unconscious, even though the person involved in the accident was not at fault, when there is no one at the scene of the accident to whom the person involved in the accident can report his name, residence, license number of his vehicle, and the certificate of registration. The doctor has no responsibility in the case with reference to such reports and he enters into it only on employment or voluntarily rendering of assistance.

2. Are there out patient departments for indigent patients who need the services of Riley Hospital or University hospital group where rural patients who are able may present themselves for examination and treatment? What procedure must be followed in these cases?

Answer: In order to get into the Riley Hospital an application signed by the judge of the Circuit Court must be presented. The Riley Hospital maintains an out-patient department for those who have become patients of the hospital through the application of the judge. The township trustee, being the overseer of the poor, is under obligation to furnish medical care and attention in cases of necessity, but he does not have the power to place the patient in the Riley Hospital. That is done through the judge of the Circuit Court.

The Long and Coleman Hospitals maintain paying departments, part-paying, part-charity, and full charity departments. To enter these hospitals, application must be made by the physician of the patient and there must be presented a certificate from the township trustee if one is to receive the charity service. After one has become a patient of either hospital, the out-patient service may be obtained under the rules of the hospitals.

3. What are the laws and regulations concerning birth control and contraceptive information and its dissemination by the physician?

Answer: Dissemination of birth control and contraceptive information by a doctor is not forbidden by law in Indiana. A doctor is forbidden, however, to sell or give away any instrument or medicine to accomplish contraception or to print or publish or give away any advertisement of any medicine or article for preventing contraception. Burns 1926, Sections 2569 and 2672.



4. What is the law concerning performance of autopsies?

Answer: There is no statute prohibiting autopsy and making performance of autopsies unlawful. But if a physician performs an autopsy without proper authorization to do so, he is liable in damages to those who have the right of burial of the dead body. The damages which can be collected are damages for the mental anguish and punitive damages in addition. The persons who have the right of burial may give their consent for the performance of an autopsy. A proper authorization for an autopsy may also be obtained from the coroner, if the circumstances of death justify the coroner holding or ordering the autopsy. The coroner may lawfully order an autopsy upon the body of any person found within his county who is supposed to have come to his death by violence or casualty. No consent from the persons having the right of burial is necessary when the circumstances present a proper case for the ordering of an autopsy by the coroner and the coroner orders such autopsy. Burns 1926, Section 11871.

5. Under the new Indiana plan, what are the rules regarding the reporting of diseases; what, when and to whom are reports to be made?

Answer: A physician is required to report diseases of a contagious or infectious character to the secretary of the City or County Board of Health. These reports are made in accordance with rules adopted by the State Board of Health, which are given the force and effect of statutes in that regard. The rules give the classification of the diseases which are regarded to be communicable and therefore necessary to be reported.

6. Are there any outstanding or unusual malpractice statutes? One year or more after services are rendered, may counter-suit for malpractice be instituted? (This is especially common where pressure for collection of an account is brought.)

Answer: There are no unusual malpractice statutes in Indiana with the possible exception of the statute upon the subject of abortion. The attempt to procure an abortion is made a criminal offense in Indiana, whether the abortion occurs or not and whatever the result is where the abortion does occur.

Communications between a patient and his physician are privileged communications, and the physician is not competent to testify to such communications. This privilege, however, is one that can be claimed only by the patient. If the patient sues the physician on account of the treatment, then by the filing of a suit he has waived the privilege and the physician can testify to all that was said and done in connection with the treatment which is the basis of the suit. A counter claim for malpractice may be filed against an action on the part of the physician to collect his fees for services.

There is some question in Indiana as to whether or not an action can be maintained in malpractice on the basis of contract rather than of tort. There have been at least two cases decided in which the court held that the action for malpractice was one in contract on the complaints filed in those cases. An action in contract is not barred until six years are passed. If the action is in tort for negligence, then it is barred at the expiration of two years. The Indiana courts have not definitely decided the question as to whether or not the recovery for the personal injuries can be had in a suit which is instituted more than two years after the date of the injury.

7. Who may sign a death certificate?

Answer: The law, as to reporting of deaths, is contained in Section 8161, Burns' Annotated Indiana Statutes of 1926. It provides that "all physicians, mid-wives, and all others persons who are now permitted or entitled to treat diseases or deformity or practice obstetrics in the state" shall report all deaths and births which may occur under their supervision; and further, that "when any death, birth or case listed as an infectious or contagious disease may occur with no physician or mid-wife in attendance, then said death, birth, or case of infectious or contagious disease shall be reported by the householder or other person having said death, birth, or case of infectious or contagious disease in charge to the health officer having jurisdiction or his deputy; and the officer to whom the report is made shall make inquiry and inspection, and in the case of a death, if he finds no evidence of death by violence or criminal practice, he may fill out the certificate of death and grant a burial permit; but if evidence of death by violence or criminal practice is found he shall refer the case to the coroner, who shall make due investigation according to law." The report of death may be made by the physician or any other person, is made to the health officer, and the health officer "if the certificate of death be properly made out, shall issue a burial permit, which permit shall be valid in all parts of the State."

## VOICE OF THE DOCTOR

### PARALYTIC ILEUS AND SPINAL ANESTHESIA

#### CASE REPORT

July 14, 1933.

Dear Editor:

I have appreciated THE JOURNAL of the Indiana State Association very much. I am enclosing a short article which I thought you might see fit to publish in THE JOURNAL.

Very truly yours,

H. E. DESTER, M. D.  
Sewa Bhawan,  
Basna, via Raipur,  
C. P. India.



Malamatti, aged about thirty years, entered the hospital with a distended abdomen caused by a tubal cyst. She weighed 120 pounds. The cyst and contents, removed on the morning of the tenth of February, weighed 46 pounds. Her general condition was only fair. She had first noticed enlargement of the abdomen a year previous to admission to the hospital.



Because of extensive adhesions of omentum, bowel, and the abdominal wall to the cyst, there was considerable trauma in removing it, and the operation lasted fully two hours. On the evening of the first day, the day of operation, some distention of the abdomen was noted. There was no passage of stool or gas the second day. Enemas, colonic irrigation, and pituitrin had no effect. In the evening 50 c.c. of 25% saline was given intravenously, without results. The third day the patient received 500 c.c. of normal saline by hypodermoclysis at

8 a. m., 50 c.c. of 25% saline intravenously at noon, 500 c.c. of normal saline intravenously at 5 p. m., besides 200 c.c. of fluids per mouth and other ordinary measures to produce bowel movement. The patient became restless, her eyes sunken, and abdomen greatly distended, but fortunately the situation was not aggravated by vomiting. At 8 p. m. of the third day spinal anesthesia was given without any apparent results until 7:30 a. m. of the fourth day, when she had two stools within an hour. After this there was no trouble with the bowels, and she made an uneventful recovery.

#### DIPHTHERIA IMMUNIZATION AND THE FORTY-AND-EIGHT

November 24, 1933.

Dear Doctor Torian:

In compliance with our conversation of some days ago, I wish to submit to you a list of the immunizations against diphtheria, which this organization has completed since October 15, as follows:

TERRE HAUTE	
4,000 c.c. Gilliland products	4,000 Children
1 c.c. dose	
650 c.c. Lilly products	1,300 Children
$\frac{1}{2}$ c.c. dose	

900 c.c. Mass. Board of Health	300 Children
3 c.c. 3 shots	
<hr/>	
	5,600 Children

The State Board of Health has also supplied a quantity of toxoid to Terre Haute of which this office has no record.

VINCENNES AND BICKNELL	
1,000 c.c. Gilliland products	1,000 Children
1 c.c. dose	
500 c.c. Lilly products	1,000 Children
$\frac{1}{2}$ c.c. dose	
<hr/>	
	2,000 Children

WASHINGTON	
600 c.c. Gilliland products	600 Children
1 c.c. dose	

RICHMOND	
400 c.c. Lilly products	800 Children
$\frac{1}{2}$ c.c. dose	

CANNELTON	
150 c.c. Gilliland products	150 Children
1 c.c. dose	

SHELBYVILLE	
900 c.c. Mass. Board of Health	300 Children
1 c.c. dose 3 shots	

COLUMBUS	
900 c.c. Mass. Board of Health	300 Children
1 c.c. dose 3 shots	

This makes a total of 9,750 children immunized in the State of Indiana under our program. This work has all been done through the various County and City Boards of Health and the County and City Medical Associations and too much credit cannot be given to the doctors and nurses who have assisted our Voitures Locales in the above mentioned cities, in carrying on this work so effectively and I believe successfully. I am unable to give you the percentage of children immunized in these communities, but we have tried to confine our work to those children whose parents could not afford or were unable to provide the immunization.

In view of the fact that this organization has already expended more funds for this work than is available for the State of Indiana, I feel that we are unable to furnish any more toxoid after the splendid work which you are now undertaking is underway. However, I can assure you that the various Locales of La Societe throughout the State will assist your committee in any way, such as assisting your committee in getting the children to the clinics when established and assisting you in such other way as you see fit to use them.

Due to pressure of other work in my office, I have been forced to delay giving you the above information, and humbly beg your indulgence.

Sincerely yours,

C. W. ARDERY,  
Correspondant National.

## DEATH NOTICES



MILES FULLER PORTER, M. D.

MILES FULLER PORTER, M. D., prominent Fort Wayne surgeon, died December sixth, following an illness of several months duration. The descendant of a family of physicians, Dr. Porter early exhibited an interest in the calling, and after his early education in the schools of his native town, Decatur, and under private tutors, he entered the Medical College of Ohio, at Cincinnati, from which he was graduated in 1878. Following a year's practice in Geneva, Indiana, Dr. Porter moved to Fort Wayne, where he became identified with the Fort Wayne College of Medicine, beginning as instructor in anatomy and rising to the professorship in surgery, which he held when the merger with the Medical College of Indiana was consummated, and which latter position he held with the Indiana University School of Medicine at the time of his death.

Doctor Porter practiced general medicine for a period of twenty years. In 1899 he limited his practice to general surgery to which he had devoted the past thirty-four years. He gained a national reputation for his ability and skill and received wide recognition through his work as president of the Indiana State Medical Association in 1896, trustee of the American Medical Association from 1900 to 1909, charter member of the American College of Surgeons and chairman of the Indiana Credentials Committee of that body, chairman of the Indiana Section, American Society for Control of Cancer, his membership in the American Surgical Association, the Southern Surgical Association, the Western Surgical Association, and his ever-loyal interest and activity in behalf of the ideals of his

profession. Dr. Porter served as advisor for THE JOURNAL from August 1, 1932, to December 31, 1932.

Editorial tribute to Dr. Porter appears on page 26 in this issue.

LEOPOLD HEIMANN, M. D., of Evansville, aged fifty-one years, died December seventh. Dr. Heimann had been a member of the staff of St. Mary's Hospital for twenty-seven years. He was a member of the Vanderburgh County Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from the University of Louisville School of Medicine in 1904.

CHARLES R. BROWN, M. D., of Marion, died December first, following an illness of about nine months. Dr. Brown was a member of the Grant County Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from the Hospital College of Medicine, Louisville, Kentucky, in 1907.

O. P. TERRY, M. D., of Lafayette, member of the staff of Purdue University since 1906, died December sixth, aged fifty-one years. Dr. Terry was medical adviser and professor in the department of biology at Purdue. He was a member of the Tippecanoe County Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from the St. Louis University School of Medicine in 1906.

WILBUR F. CLIPPINGER, M. D., of McCutchanville (R. F. D. Evansville) died in an Evansville Hospital, December tenth, aged seventy years. Dr. Clippinger was a member of the Vanderburgh County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Medical College of Ohio, Cincinnati, in 1888.

## HOOSIER NOTES

THE Owen County Medical Society held its regular meeting at Spencer December eighth.

MEMBERS of the Elwood Medical Society met November twenty-ninth to discuss plans for the diphtheria immunization program.

DR. L. E. SOMERS, of Decatur, has sold his practice to Dr. Floyd Grandstaff, of Preble. Dr. Somers plans to take postgraduate work.



THE annual dinner meeting of the Lake County Medical Society was held at the Gary Hotel, December fourteenth. The principal speaker was Dr. Robert F. Lischer, of Mascoutah, Illinois.

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THE Perry County Medical Society held a meeting at Tell City, November twenty-first, to discuss the immunization campaign against diphtheria.

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AT the December sixth meeting of the Marshall County Medical Society, officers for 1933 were re-elected to serve in 1934.

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DR. EARL W. BAILEY, of Bunker Hill, and Miss Mildred M. Fish, of Toledo, Ohio, were married November twenty-ninth.

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DR. WILLIAM F. HEALY, of Evansville, and Miss Ruth Gresham, of Logansport, were married November fifteenth.

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DR. A. GRAEME MITCHELL, of Cincinnati, addressed the Indianapolis Medical Society, November twenty-first.

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DR. R. E. WHITEHEAD, of Indianapolis, has been made medical director for the aeronautics branch of the Commerce Department at Washington, D. C.

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THE Posey County Medical Society met in Mount Vernon, November sixteenth, with Drs. W. E. Jenkinson and W. B. Challman as hosts.

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THIRTY members of the Cass County Medical Society were shown moving pictures presented at Logansport, December fifteenth.

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DR. LEWIS J. POLLOCK, of Chicago, was the principal speaker at the December nineteenth meeting of the Fort Wayne Medical Society.

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A SYMPOSIUM on vaccine therapy formed the program for the Indianapolis Medical Society, November twenty-eighth.

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DR. MATTHEW WINTERS, of Indianapolis, spoke before the members of the Hendricks County Medical Society, at Danville, November seventeenth. This was a dinner meeting.

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PHYSICIANS and dentists of Carroll County have been invited to hear Dr. R. G. Block, of Chicago, when he addresses the Carroll County Tuberculosis Association, at Delphi, January eighteenth.

FIRE of undetermined origin destroyed the Mills Building at Boehne Tuberculosis Hospital, Evansville, November twenty-fifth, with a loss estimated at \$85,000.

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HANCOCK, Bartholomew, Shelby, Rush, and Decatur counties held a joint meeting at Shelbyville, December nineteenth. The topic of discussion was "Cancer."

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OFFICERS of the Cass County Medical Society for 1934 are Dr. Foss Schenck, Logansport, president; Dr. B. W. Egan, Logansport, vice-president; and Dr. E. L. Hedde, Logansport, secretary-treasurer.

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DR. S. J. MILLER, assistant medical adviser at Purdue University for seven years, has been made acting director of the student health service to succeed the late Dr. Oliver P. Terry.

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DENTISTS of Greene County were guests of the Greene County Medical Society at a quail dinner in the Freeman-Greene County Hospital, December fourteenth.

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"PRACTICAL Points in the Care and Feeding of Infants" were discussed by Dr. W. McKim Marriott, of St. Louis, at the December twelfth meeting of the Muncie Academy of Medicine.

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DR. VERNON LEACH, of Chicago, was the principal speaker at the November twenty-eighth meeting of the Porter County Medical Society. His subject was "Common Diseases of the Eye."

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A DISCUSSION of the state program for diphtheria immunization formed the program for the meeting of the Sullivan County Medical Society, December sixth, at the Mary Sherman Hospital, Sullivan.

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MEMBERS of the Decatur County Medical Society met at Greensburg, November eighteenth, for a business session. No scientific program was presented.

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THE JOURNAL inadvertently advertised influenza and catarrhal vaccines in a recent issue. These are not accepted by the Council on Pharmacy and Chemistry of the American Medical Association, and THE JOURNAL regrets the publication.

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ELECTION of officers for the Wabash County Medical Society was held at the December sixth meeting. Dr. F. M. Whistler was elected president; Dr. Gordon Kidd, vice-president; and Dr. R. M. LaSalle, secretary.

A CEREMONY honoring the memory of Dr. Alfred Henry, Indianapolis physician who died in December, 1932, was held at the City Hospital, Indianapolis, December twelfth, when a portrait of Dr. Henry was presented to the Hospital.

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At the December seventh meeting of the Steuben County Medical Society, held in Angola, officers were elected for 1934: President, Dr. S. S. Frazier; vice-president, Dr. W. F. Waller; and secretary-treasurer, Dr. Mary T. Ritter.

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MEMBERS of the Monroe County Medical Society met December eighth to elect officers for 1934. Dr. F. H. Austin, Bloomington, was made president; Dr. Ben Ross, Bloomington, vice-president; and Dr. H. B. Thomas, Bloomington, secretary-treasurer.

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DR. F. H. LASHMET, of Ann Arbor, Michigan, addressed the Northeastern Indiana Academy of Medicine at Kendallville, November twenty-third. His subject was "New Concepts of Renal Function and Nephritic Type of Edema."

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MISS FANNIE KISER, of Indianapolis, and DR. BERNARD D. ROSENAK, of Terre Haute, were married December fourteenth, in Indianapolis. Mrs. Rosenak is the daughter of Dr. and Mrs. Edgar F. Kiser, of Indianapolis.

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THE Orange County Medical Society met in Orleans, December fifth. Supper was served by the auxiliary members, following which the annual business meeting was held. All of the officers and committees for 1933 were re-elected for 1934.

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THE LaPorte County Medical Society met at the Rumely Hotel, LaPorte, November sixteenth, with twenty-five in attendance. Dr. N. C. Gilbert, of Chicago, presented a paper on "Bedside Diagnosis of Cardiac Arrhythmias."

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THE Jasper-Newton County Medical Society met at Brook, December first. Twenty-two guests heard Dr. Hugh A. Kuhn, of Hammond, discuss "Nasal Accessory Sinus Disease and Its Relation to Non-Tuberculosis Chest Infections."

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MEMBERS of the Indiana Academy of Ophthalmology and Otolaryngology held their annual meeting at the Lincoln Hotel, Indianapolis, December thirteenth. Dr. Lewis J. Pollock, of Chicago, was a guest speaker.

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At the December eighth meeting of the Howard County Medical Society, Dr. E. M. Shenk, of Kokomo, was made president for 1934; Dr. E. R. Clarke, Kokomo, vice-president; and Dr. W. J. Marshall, Kokomo, secretary-treasurer.

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THE Jennings County Medical Society met in the Library Building, at North Vernon, December nineteenth, for election of officers. Dr. J. H. Green, of North Vernon, was made president; Dr. W. H. Stemm, of North Vernon, vice-president; and Dr. D. L. McAuliffe, North Vernon, secretary and treasurer.

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THE most successful meeting in the history of the Knox County Medical Society was held December eighteenth. Twenty-four of the twenty-six eligible members were present. Dr. D. H. Richards of Vincennes, was elected president for 1934, and Dr. Maurice Fox, of Bicknell, was made secretary.

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ACCORDING to newspaper announcements, at the December sixth meeting of the Shelby County Medical Society, it was decided that the free medical clinics will not be resumed because the re-employment of many men in civil works projects has reduced the need for the service.

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At the December nineteenth meeting of the Wells County Medical Society in Bluffton, officers were elected for 1934 as follows: president, H. D. Brickley, Bluffton; vice-president, D. C. Wybourn, Ossian; secretary-treasurer, C. N. Baganz, Uniondale.

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At the annual business meeting of the St. Joseph County Medical Society, December fifth, Dr. J. V. Cassady was made president for 1934; Dr. C. C. Terry, vice-president; Dr. Martha Lyon, secretary-treasurer; and Dr. D. W. Frash, assistant secretary-treasurer.

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DR. H. B. METTEL, of Indianapolis, addressed the University of Michigan Pediatric Society at Ann Arbor, Michigan, November seventeenth. His subject was "Further Observation in the Use of Glycine and Other Products in the Treatment of Pseudohypertrophic Muscular Dystrophy."

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THE Hancock County Medical Society held its regular meeting at the Columbia Hotel, Greenfield, December eleventh. Discussions of the subjects "Dental Practice During Pregnancy," "Obstetrical Procedure," "Caesarean Section and Sequelae," were presented by Drs. Allen, Larrabee, and Hawk.

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MEMBERS of the Lawrence County Medical Society met at Bedford, December sixth, for a business meeting. Officers for 1934 were elected as follows: President, Dr. R. B. Smallwood, Bedford; vice-president, Dr. Claude B. Dollens, Oolitic; secretary, Dr. L. H. Allen, Bedford.

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THE Fountain-Warren County Medical Society met December seventh, at Attica, for election of officers. Dr. J. C. Freed was made president; Dr. A. L. Ratcliff, vice-president; and Dr. A. L. Spin-



ning, secretary. The diphtheria immunization program was discussed.

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THE Boone County Medical Society held a meeting at Lebanon, December sixth, for discussion of the diphtheria immunization campaign and election of officers for 1934. Dr. R. S. Ball was made president; Dr. J. D. Coons, vice-president; and Dr. E. A. Rainey, secretary.

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THE Kosciusko County Medical Society met at the Hotel Hayes, Warsaw, December fifth. Election of officers for 1934 resulted as follows: President, Dr. C. R. Hoy, Syracuse; vice-president, Dr. T. J. Clutter, Mentone; and secretary (re-elected) Dr. R. E. Phillips, Warsaw.

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THE Indianapolis Medical Society at its December fifth meeting elected Dr. Henry Leonard as president for the coming year; Dr. Robert Masters, first vice-president; Dr. Roy V. Myers, second vice-president; and Dr. James S. McBride, re-elected secretary-treasurer.

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PHYSICIANS of New Albany and Jeffersonville were guests of the New Albany and Jeffersonville Dental Society at a meeting held December twelfth. Dr. T. M. Crutcher and Dr. E. C. Hume, dentists of Louisville, Kentucky, presented papers on "Mouth Hygiene" and "Fractured Jaw."

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DR. E. M. GLASER, of Brookville, was made president of the Fayette-Franklin County Medical Society at a dinner meeting, December twelfth, in Connersville. Dr. A. F. Gregg, of Connersville, was made vice-president; and Dr. R. H. Elliott, Connersville, was re-named secretary-treasurer.

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AT the December twelfth meeting of the Rush County Medical Society, Dr. G. B. McNabb, of Carthage, was made president of the society; Dr. Will S. Coleman, of Carthage, was made vice-president; and Dr. Frank Green, Jr., secretary-treasurer.

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DR. AMOS REUSSER, of Berne, was made president of the Adams County Medical Society at the meeting of the society held in Decatur, December eighth. Other officers elected were Dr. S. D. Beavers, Decatur, vice-president, and Dr. G. J. Kohne, Decatur, secretary-treasurer.

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DR. J. ROSS TRACY was named president of the Madison County Medical Society at the December eleventh meeting of the society in Anderson. Dr. E. E. Hunt, Pendleton, was made vice-president; and Dr. S. W. Litzenberger, Anderson, was made secretary-treasurer.

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AT the December eleventh meeting of the Hancock County Medical Society, officers for 1933 were re-elected for 1934, with Dr. E. A. Hawk, president; Dr. S. W. Hervey, vice-president; and Dr. J. L. Allen, secretary. The meeting time for this society has been changed to the third Monday evening of each month.

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A MOTION picture showing the administering of the first ether anesthetic, in 1846, was shown at the meeting of the Indianapolis City Hospital Staff Society, December thirteenth. In connection with the picture, a paper was read telling of the history of anesthetics.

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THE Miami County Medical Society met at Peru, November twenty-fourth, to discuss the diphtheria immunization campaign. Five new members have been elected to membership in this society: Dr. Blanche Muldoon, Peru; Dr. Earl W. Bailey, Bunker Hill; Dr. V. E. Baldwin, Amboy; Dr. S. J. Ferrara, Peru; and Dr. J. D. Malott, Converse.

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A SYMPOSIUM on public health work was presented before members of the Indianapolis Medical Society at the December twelfth meeting. Subjects were "Modern Trends in Public Health Work" presented by Dr. H. G. Morgan; "Encephalitis" by Dr. E. Rogers Smith; and "Venereal Diseases" by Ernest Rupel.

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AN article in the December JOURNAL concerning Carroll County's diphtheria immunization campaign mentioned an educational program preceding the campaign. The entire educational program, conducted by the Indiana State Board of Health, preceded the giving of the toxin-antitoxin in the fall of 1932.

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A SPECIAL meeting of the Miami County Medical Society was held at Peru, December fifteenth, to consider the C. W. A. public health nurses, C. W. A. medical care, and the diphtheria immunization program. The diphtheria immunization program was approved at the November twenty-fourth meeting and has been in full swing for several weeks.

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PHYSICIANS who attended the postgraduate course presented by Carroll and Cass counties have expressed themselves as being well repaid for the time spent in attending the lectures. Attendance for the five nights totaled 221, an average of 44.2 for each class.

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THE Decatur County Medical Society met at Greensburg, November twenty-eighth, to discuss plans for the diphtheria immunization campaign. A committee was appointed to work with lay organizations in carrying out the campaign. Drs. W. E. Thomas, H. S. McKee, and W. C. Callaghan are members of the committee.

THE Dearborn-Ohio County Medical Society held its annual banquet at the Dillsboro Sanitarium, December eighth, with thirty-one members present. Officers were elected as follows: Dr. F. J. Treon, Aurora, president; Dr. C. W. Olcott, Aurora, vice-president; Dr. E. L. Libbert, Lawrenceburg, secretary-treasurer.

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MEMBERS of the Henry County Medical Society held a dinner meeting at Lewisville, December seventh, with forty members and guests present. Medical economics provided the topic for discussion. Officers were elected: Dr. W. U. Kennedy, New-castle, president; Dr. W. S. Robertson, Spiceland, vice-president; Dr. George Wiggins, Newcastle, secretary-treasurer.

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DR. GEORGE V. CRING, of Portland, was made president of the Jay County Medical Society at its regular monthly meeting held December first at the Portland Country Club. Dr. E. C. Garber, of Dunkirk, was made vice-president; and Dr. B. M. Taylor, of Portland, was made secretary for the sixth successive year.

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PRELIMINARY announcements have been sent out concerning the American Conference on Birth Control and National Recovery, to be held at the Mayflower Hotel, Washington, D. C., January 15, 16 and 17, 1934, under the auspices of the National Committee on Federal Legislation for Birth Control. Conference headquarters are 1343 H Street, N. W., Washington, D. C.

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The Hamilton County Medical Society held a meeting at Noblesville, December fifth, with an attendance of twenty-six. Election of officers resulted as follows: Dr. Emil Kenyon, Carmel, president; Dr. Andrew Connoy, Westfield, vice-president; and Dr. H. C. Kraft, Noblesville, secretary-treasurer (re-elected).

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DR. R. L. COMPTON, of Osgood, has announced his absence from practice in Osgood to serve on the resident staff of the St. Louis Children's Hospital, under Dr. William McKim Marriott. Dr. George S. Row, of Osgood, will take over Dr. Compton's office equipment and practice in his absence. Dr. Compton has been secretary of the Ripley County Medical Society for the past seven years.

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THE Cass County Medical Society held a meeting at Logansport, November seventeenth, with thirty-five present. Dr. C. T. Duchess, of Galveston, talked about "Intravenous Glucose"; Dr. H. Tripp, of Kewanna, discussed "Local Anesthesia in Labor" and Dr. C. L. Williams, of Logansport, presented a paper on "Neurological Changes in Pernicious Anemia."

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FORTY-FIVE attendants at the December seventh meeting of the Elkhart County Medical Society heard Dr. William J. Butler, of Grand Rapids, Michigan, read a paper entitled "Acute and Chronic Gonorrhea." Officers for 1934 were elected, making Dr. Floyd I. Ficher, of Wakarusa, president; Dr. A. W. Hull, Elkhart, vice-president; and Dr. S. T. Miller, Elkhart, secretary-treasurer (re-elected).

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AT the meeting of the Dekalb County Medical Society held in Garrett, December seventh, Dr. L. N. Geisinger, of Auburn, was re-elected president for the fourth year. Dr. D. M. Reynolds, of Garrett, was named vice-president, and Dr. Harold Nugen, of Auburn, re-elected secretary-treasurer. Plans were made for the immunization campaign in Dekalb County.

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THE United States Civil Service Commission announces open competitive examinations for the positions of senior toxicologist, toxicologist, associate toxicologist, and assistant toxicologist. Applications must be on file not later than January 11, 1934, with the U. S. Civil Service Commission at Washington, D. C., from where the necessary application forms may be secured.

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THE Noble County Medical Society met at Kendallville, December twelfth. Plans were made for caring for the indigent, and a discussion of the relationship of Noble County to the Irene Byron Tuberculosis Sanitarium was heard. Plans were discussed for educating the public in the matter of better obstetrics. Officers elected for 1934 were Dr. F. W. Messer, Kendallville, president; Dr. H. A. Luckey, Wolf Lake, vice-president; and Dr. W. F. Carver, Albion, secretary-treasurer re-elected.

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THE United States Civil Service Commission has announced open competitive examinations for the position of toxicologist, applications for which may be made with the Commission not later than January eleventh, 1934. Competitors will not be required to report for a written examination, but will be rated on their education and experience. Full information may be obtained from the Secretary of the United States Civil Service Board of Examiners at the postoffice or custom-house in any city, or from the United States Civil Service Commission, Washington, D. C.

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ON December eighth a program on maternal health was given at Delphi by the Obstetrical Department of the Indiana University School of Medicine and the Indiana Division of Public Health. In the afternoon clinics on Thyroid and Pregnancy, Toxemia of Pregnancy, Edema and Varicosities,



were presented, and addresses were read concerning Breech Presentation, Hemorrhages in Obstetrics, Home Obstetrics, and Prenatal Care in General Practice. In the evening, physicians and laymen were invited to attend a moving picture "The Story of Life," and papers on Better Obstetrics and Importance of Obstetrics, were read.

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APPLICATION blanks are now available for space in the Scientific Exhibit at the Cleveland Session of the American Medical Association, June 11 to 15, 1934. The Committee on Scientific Exhibit requires that all applicants fill out the regular application form and requests that this be done as early as convenient. The final date for filing applications is February 26, 1934. Any persons desiring application blanks, should address a request to the Director, Scientific Exhibit, American Medical Association, 535 North Dearborn Street, Chicago, Illinois.

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FIFTY-THREE members attended the annual business meeting of the Tippecanoe County Medical Society, at the Lafayette Club, December fourteenth. Reports of committees were made, care of the indigent was discussed, and the immunization campaign for the county was considered. Officers were elected for 1934: Dr. W. W. Washburn, Lafayette, president; Dr. G. R. Clayton, Lafayette, vice-president; Dr. J. C. Burkle, Lafayette, re-elected secretary, Dr. Charles Hupe, Lafayette, re-elected treasurer. Dr. Charles Hupe and Dr. F. B. Thompson were elected to honorary membership in the society.

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MEMBERS of the Gibson County Medical Society met at the Methodist Hospital in Princeton, December eleventh. Officers were elected as follows: President, M. L. Arthur, Patoka; vice-president, E. R. Ropp, Oakland City; and secretary-treasurer, O. M. Graves, Princeton. Meetings of this society are held the second Monday of each month at the Methodist Hospital in Princeton. Scientific meetings have been outlined for January ninth, February twelfth, March twelfth, April ninth, May fourteenth, June eleventh, September tenth, October eighth, November twelfth, and December tenth; a staff conference will form the program for July ninth, and a social meeting will be held August thirteenth.

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A DINNER meeting of the Posey County Medical Society was held in New Harmony, December fourteenth, with Dr. A. R. Reitz, dentist, presenting a paper on "The Teeth." In a discussion of the immunization program, it was concluded that since the Posey County Medical Society conducted an immunization program in March, 1932, at which time some 3,800 children were given diphtheria

toxin antitoxin and 2,500 were vaccinated for smallpox, further efforts in that direction now are unwarranted; however, the society will cooperate as individuals and offer, through the press, to care for any person wanting immunization. Officers for 1934 were elected: Dr. K. C. Fitzgerald, New Harmony, president (re-elected); Dr. H. E. Ropp, New Harmony, vice-president; W. E. Jenkinson, Mount Vernon, secretary-treasurer (re-elected).

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THE Elkhart County Medical Society has sent a letter to senators and representatives in Congress, asking support of the Copeland Bill to improve the "intolerable conditions now present due to the failure of enforcement of the present food and drug law." The letter says, "Because of the laxity of the present law there have grown up huge medical and cosmetic industries whose moral obligations to the public are figured only in terms of profit to themselves. As a result there is spent much needless money, valuable time is lost in the use of nostrums, and many have suffered irreparable physical damage. Therefore this society invites your earnest and thoughtful consideration of this measure with the hope that unscrupulous manufacturers and advertisers will be brought within the bounds of honesty."

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The Eighth District Medical Society held a reorganization meeting at Anderson, December sixth, which proved to be one of the most successful medical meetings ever sponsored in Anderson. The Madison County Medical Society was host for the 150 physicians who attended the meeting. Officers for the district were elected, making Dr. E. M. Conrad, of Anderson, president; Dr. V. G. McDonald, Anderson, secretary; and Dr. M. A. Austin, Anderson, counselor. Brief scientific talks were given at the afternoon session, and in the evening Drs. B. R. Kirklin and Frank Mann, of Rochester, Minnesota, delivered principal addresses. Physicians were in attendance from Grant, Tipton, Hamilton, Henry, Madison, Randolph, Jay, Blackford, Howard, and Marion counties. Between the afternoon and evening meetings, Dr. H. W. Gante entertained a group of physicians at dinner, at which time plans were made for the organization of the Indiana Pediatric Society, and a committee was appointed to proceed with plans. A group of district and state officers were entertained at dinner by Dr. M. A. Austin. Muncie was selected as the 1934 meeting place for the society.

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IN ADDITION to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories

Abbott's Haliver Oil, Plain Capsules

Phenobarbital Sodium—Abbott

Lederle Laboratories, Inc.

Gas Gangrene Antitoxin Polyvalent—Not Refined  
Antipneumococcic Serum, Refined and Concentrated, Type II

Mead Johnson & Co.

Mead's Viosterol in Halibut Liver Oil 250-D (In Capsules)

Sharp & Dohme, Inc.

Arizona Ash Pollen Extract—Mulford; Barnyard Grass Pollen Extract—Mulford; Birch Pollen Extract—Mulford; Chrysanthemum Pollen Extract—Mulford; Hemp Pollen Extract—Mulford; Mesquite Pollen Extract—Mulford; Papaw Pollen Extract—Mulford; Primrose Pollen Extract—Mulford; Arizona Walnut Pollen Extract—Mulford; Sycamore Pollen Extract—Mulford; Saw Grass Pollen Extract—Mulford; Sagewort Pollen Extract—Mulford; Prairie Sage Pollen Extract—Mulford; Pasture Sage Pollen Extract—Mulford

E. R. Squibb & Sons

Concentrated Antipneumococcus Serum Types I and II

Diluted Diphtheria Toxoid for Reaction Test, 1 cc. Ampule

Winthrop Chemical Co., Inc.

Luminal Sodium Solution in Ethylene Glycol

## INDIANA UNIVERSITY NEWS NOTES

HIGH national rating for the Indiana University hospitals and dietary department have been announced in awards from the American College of Surgeons and the American Dietetic Association. Director General Franklin H. Martin of the American College of Surgeons has advised Dean W. D. Gatch of the I. U. Medical School that the Long, Coleman and Riley hospitals of the Indiana University medical center, Indianapolis, have been awarded "full approval."

Chairman Mary de Garmo Bryan of the Approved Hospital Listing of the American Dietetic association states that the training offered by the I. U. dietetics department "is one of the strongest in the country."

INDIANA UNIVERSITY had a number of former students and graduates who were on the program of the Indiana Society for Mental Hygiene which was held at the Claypool Hotel, Indianapolis, during the first week of December. Donald DuShane, former student, was president. Dr. Olga Hoffman, who received the M. D. degree in 1931; Dr. Charles P. Emerson, research professor in the I. U. medical school; Dr. L. P. Harshman, who received the M. D. degree in 1919; Dr. C. O. McCormick, graduate of the class of 1911; Dr. Raymond E. Mitchell, 1930; W. D. Hennessy, Jr., 1930; Mrs. Ruth

Heavenridge, 1926; Dr. C. M. Louttit, member of the faculty; Paul Moore, former student; Prof. James J. Robinson, graduate and member of the faculty, were on the program.

A MANUSCRIPT on "Heart Disease" was read by Elmer Koonsman, Kokomo, medical student in the Bloomington division of the Indiana University School of Medicine before a recent meeting of the Theta Kappa Psi professional medical fraternity.

PROF. F. J. MENDER of the Indiana University German department discussed "The Value of German to the Medical Profession" before the November meeting of the Phi Chi professional medical fraternity at Indiana University.

PRE-MEDIC students at Indiana University took the Association of American Medical Colleges' aptitude test Wednesday, December 6. The test was taken by all students expecting to apply for entrance to a medical school by the fall of 1934. The test has been adopted by the association as one of the normal requirements for admission.

DR. W. D. GATCH, dean of the Indiana University Medical School at Indianapolis, spoke before the December meeting of the Skeleton Club, freshman medical fraternity at Indiana University, Bloomington. Dr. Gatch emphasized patience, a keen sense of judgment and reasoning as qualities necessary for a doctor.

"LAST year there were 172 deaths in Indiana from diphtheria," according to Dr. Thurman B. Rice of the Indiana University School of Medicine in commenting on the present immunization movement of the State Board of Health. Dr. Rice is chairman of the diphtheria prevention committee of the Indiana State Medical Association.

"If one would suppose that a funeral costs \$200, the expense of burying the Indiana children who died of diphtheria last year was more than twice the cost of immunization materials for indigent cases in the present campaign," Dr. Rice said.

"We are much gratified to find that the public is being aroused and the medical profession is undertaking this great campaign of immunization. It is perfectly possible without undue effort to save the lives of 100 children a year. This benefit continues not merely for one year, but for several years, and if the children who are being born would be immunized by the time they were six to nine months of age, there is no reason why the death rate from diphtheria might not be forced to very low levels."



# BOOK REVIEWS

## BOOKS RECEIVED

**SURGICAL CLINICS OF NORTH AMERICA** (Chicago Number—October, 1933). Volume 13, No. 5. Octavo of 254 pages with 93 illustrations. Per clinic year, February, 1933, to December, 1933; paper, \$12.00; cloth, \$16.00 net. W. B. Saunders Company, Philadelphia and London, 1933.

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**THE 1933 YEAR BOOK OF GENERAL MEDICINE.** Edited by George F. Dick, M. D., Lawrason Brown, M. D., George R. Minot, M. D., S. D., William B. Castle, M. D., William D. Stroud, M. D., and George B. Eusterman, M. D. 831 pages. Cloth. The Year Book Publishers, Inc., Chicago, 1933.

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**A MANUAL OF DISEASES OF THE NOSE, THROAT AND EAR** (Seventh edition). By E. B. Gleason, M. D., LL. D., Professor of Otology, Medico-Chirurgical College Graduate School of Medicine, University of Pennsylvania, Philadelphia. Seventh edition, revised and entirely reset. 651 pages with 261 illustrations. Cloth, price \$4.50. W. B. Saunders Company, Philadelphia and London, 1933.

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**INTERNATIONAL CLINICS.** A Quarterly of Illustrated Clinical Lectures edited by Louis Hamman, M. D., with the collaboration of fourteen leading members of the medical profession throughout the world. Volume IV, forty-third series. Cloth. 317 pages. J. B. Lippincott Company, Philadelphia, Montreal, London, 1933.

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**VOLUNTARY MOTHERHOOD.** By Antoinette F. Konikow, M. D., fourth edition, completely rewritten. Thirty-six page, paper-cover, illustrated pamphlet, copyrighted by the author. Price, fifty cents per copy. Published by the Buchholz Publishing Company, Boston, 1933.

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## BOOK REVIEWS

**FETAL, NEWBORN, AND MATERNAL MORBIDITY AND MORTALITY.** Report of the Sub-committee on Factors and Causes, Hugo Ehrenfest, M. D., Chairman. White House Conference on Child Health and Protection. D. Appleton-Century Co., New York. 1933. pp. 486. Price, \$3.00.

There is much information in this book. It is not a textbook, but consists of twenty-two reports by picked men on all the factors related to fetal, newborn and maternal welfare from the statistical and clinical standpoint. It relates the practices in use in this country at the present time and gives recommendations for the best procedures.

The book begins with a summary and recommendations by the chairman. There follow chapters on every ordinary and unordinary condition related to maternity and the newborn in relation to birth. It is estimated that during the six months preceding viability there is greater loss of life than during the following sixteen years. Of abortions, it is estimated that 50 per cent are criminally induced, 37 per cent spontaneous, and 13 per cent therapeutic. Much space is given to the systemic diseases in relation to pregnancy. Conservative methods of treatment are recommended for the toxæmias in general, with few exceptions.

The opinion is given that preconceptional irradiation is harmless but that radium or roentgen-ray should never be used postconceptional, except the short exposures for roentgenograms.

The responsibility of the attendant for birth injuries is stressed. The many forms of anaesthesia are evaluated. First place among extragenital causes of fever is given to

respiratory infections, then pyelitis. The too rapid recourse to instrumental interference in labor is held responsible for unnecessary infections after labor.

It is hoped that changes can be made in official birth and death certificates so that better information may be obtained about the causes of death of mother or child in connection with pregnancy and birth.

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**OBSTETRICS AND GYNECOLOGY:** Vol. III. By eighty leading specialists. Edited by Arthur Hale Curtis, M. D., Professor and Head of the Department of Obstetrics and Gynecology, Northwestern University Medical School; Chief of the Gynecologic Service, Passavant Memorial Hospital, Chicago, Ill. Complete in three volumes and separate desk index; 3,500 pages with 1,664 illustrations, many in colors. Philadelphia and London: W. B. Saunders Company, 1933. Per set, cloth, \$35.00 net.

This is the third and last volume of this work. There is also a separate general index of 137 pages, although each volume has its own index.

Dr. Curtis, in the opening chapter, stresses the value of reconstructing pelvic tissues without undue "tension, fixation, or rigidity." The chapters on repair are by J. L. Baer, L. K. P. Farrar and G. G. Ward.

The chapters on the endocrines in obstetrics and gynecology are no doubt the best authority to be found for they are written by E. Novak, E. Allen, G. W. Corner, P. E. Smith and E. T. Engle.

This volume covers all the special topics related to obstetrics and gynecology. There is a thorough presentation of leukorrhea by C. H. Davis, and one on lumbosacral and sacral backache by F. W. Lynch. Low backache was present in about 50 per cent of gynecological cases operated upon by Lynch and by Ward and was relieved by the operation in 76.5 per cent of Lynch's and 85 per cent of Ward's cases.

Urinary tract problems are discussed by G. L. Hunner and W. C. Danforth, roentgenography by J. T. Case, and radiotherapy by C. F. Burnam. The anaesthesia best fitted for this division of surgery is discussed by R. M. Tovell. There is a chapter on neuropsychiatry by L. J. Pollock and one by W. S. Middleton on the internist in relation to obstetrics and gynecology.

The whole set makes an American authority on obstetrics and gynecology which completely covers the field and one of which the editor and the contributors may feel justly proud.

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**THE STORY OF CHILDBIRTH,** by Dr. Palmer Findley, former Professor of Gynecology in the College of Medicine of the University of Nebraska; former President American Association of Obstetricians, Gynecologists and Abdominal Surgeons; former President Central States Association of Obstetricians and Gynecologists. 124 illustrations. Price, \$3.00. Doubleday, Doran & Co., Inc., New York, N. Y.

Dr. Findley has gone far back into obstetrical literature and traced the development of obstetrics from the days when the child-bearing process was surrounded with much mystery, secrecy, and superstition, to the present day of scientific obstetrics. Much of this book deals with very early obstetric procedures which were so crude and unscientific that modern laymen and physicians can scarcely believe they were ever practiced. A tribute is paid to the nursing profession by brief historical remarks on early obstetrical nursing and part present day nursing plays in good obstetrical care. A very excellent chapter is that devoted to birth control.

The author leads the reader into our modern maternity hospitals and dwells upon the development of the scientific side of obstetrics at the same time warning against relegating the art of obstetrics too far into the background. The author quotes statistics showing the United States to have a very high maternal mortality rate as compared with the figures of other civilized nations but reminds the reader that there are many reasons why the figures from different nations are not comparable. As a whole the book reads easily and can be well

read and understood by the laymen. It is informative to the medical profession and cannot fail to impress the reader with the wide difference between early and modern obstetrics.

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**LOCAL ANESTHESIA.** By Arthur E. Hertzler, A. M., M. D., Ph. D., L.L. D., F. A. C. S., Professor of Surgery, University of Kansas. Fifth edition. 148 illustrations. 292 pages. Cloth. C. V. Mosby Co., St. Louis. 1933.

This is a volume of unusual value to the surgeon and general practitioner; every sentence is condensed and weighted and must be studied carefully. The chapters on spinal anesthesia, by A. E. Spelman, M. D., and on intravenous anesthesia, by R. F. Gard, M. D., are additions to this new edition. Both of these latter fields have undergone such intense cultivation in recent years, and opinion as to the utility still remains diverse, that reading of these chapters should be supplemented by a thorough knowledge of the current literature on the subjects before putting the methods into actual practice. The opinions expressed herein may be called conservative.

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**COLLECTED PAPERS OF THE MAYO CLINIC.** Vol. XXIV 1933. Edited by Mrs. Maud H. Mellish, Wilson and Richard M. Hewitt, B. A., M. A., M. D. W. B. Saunders Co., Philadelphia and London.

This is a large volume of 1,205 pages, covering many diverse subjects, of practical interest to almost every physician practicing medicine. Most of the papers are supplemented by actual case histories, statistical data from the literature, or from the Mayo Clinic, or by records of treatment and a study of end results in their relation to mortality and morbidity.

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**THE HEALING CULTS.** By Louis S. Reed, Ph. D., Cloth. Price \$2.00. University of Chicago Press, Chicago, 1932.

This book comes from the University of Chicago Press, which concern had to do with the publication of the Final Report of the Committee on the Costs of Medical Care. It is entertainingly written and for the student of cultism will provide a mine of information.

The author discusses Chiropractic, Osteopathy, Naturopathy, Christian Science, and New Thought, not overlooking other types of faith healing as exemplified in various churches. His concluding chapter is on "The Causes and Control of Medical Sectarianism," a most interesting exposition of the subject.

The reader will find a perusal of the 121 pages a pleasant and informative diversion.

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**MINOR MALADIES AND THEIR TREATMENT.** By Leonard Williams, M. D. Sixth edition. Cloth. 420 pages. Price \$3.75. William Wood and Company, Baltimore, 1933.

There is much of merit in this book if one who is a fundamentalist is able to get over the shock of noting some palpable nostrums, such as Hazeline and Listerine, boldly appearing in some prescriptions recommended in the very first pages. Later on in the book we come to some hoary prescriptions of the "shotgun" type, some seemingly of the "scattering" pattern.

The author has a quaint method of expression, as is evidenced by a paragraph or so from his chapter on obesity: "There are said to be three degrees of fatness—the enviable, the comical and the pitiable; but the truth is that no degree of corpulency is enviable. When one considers the difference a pound of weight on a horse's back will make to its prospect of winning a race, it must be obvious that the unnecessary burden of lard which a fat man carries about with him must act as a serious handicap to his 'circulatory system.'"

There is a lot of red meat in the book, though, as we have said, one must be an extreme modernist in order to forget the bad taste left by the glaring irregularities in advocated therapy.

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**FOOD, NUTRITION, AND HEALTH.** By E. V. McCollum, Ph. D., Sc. D., and J. Ernestine Becker, M. A. Third edition, rewritten. 146 pages. Cloth. Price \$1.50. Published by

E. V. McCollum and J. Ernestine Becker, Baltimore, Md., 1933.

This book will controvert much of the misinformation which faddists and medical quacks are continually disseminating. Issued first in 1925, it has had ten reprintings and is now in its third edition.

The forepart of the book is given over to a discussion of the proteins, the carbohydrates, and the minerals, all of which play an important part in bodily nutrition. Dietary considerations have a prominent place in the book, these being exceptionally well written, the matter being most convincingly presented. The dietary properties of many foods are considered and the remarks on tea and coffee are sanely stated.

The chapter on diet and preventive dentistry is a most lucid one and sets at naught many of the preposterous claims hitherto promulgated.

As might be expected, there is a chapter on reducing diets; this subject is most carefully gone into and offers about the best pronouncements on the subject we have yet seen. Much of the tommyrot being published on the subject of reducing diets is unceremoniously discounted in a most convincing manner.

Menus, suggestions, and tables, setting forth the distributions of the various vitamins, form the concluding chapters of the book. This book, prepared by two very eminent authorities, is a very much worthwhile addition to one's library.

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**HOW TO STAY YOUNG.** By Robert Hugh Rose, A. B., M. D. 195 pages. Cloth. Price \$1.50. Funk and Wagnalls Co., New York and London, 1933.

Dr. Rose uses some 200 pages in telling one how to

"Stay young with me,

The best is yet to be,

The last of life, for which the first was planned."

This is the foreword, adapted from Robert Browning.

He intimately discusses the life habits of Dewey, Edison, Frohman, Rockefeller, Ford and others, citing them as examples of busy men who remained young, despite their many activities.

The author of "Eat Your Way to Health," Dr. Rose finds a place in the present book for a chapter, "Eat Your Way to Youth." Menus, as a matter of course, furnish an important chapter.

The second section of the book deals with such interesting subjects as Methods of Rejuvenation, including gland therapy; Life Shortening Diseases; Heart Troubles; Life Shortening Habits; Teeth a Good Index; and The Golden Mean. In all, the book is quite readable and seems founded on sound premises.

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**DISEASES OF THE CHEST AND THE PRINCIPLES OF PHYSICAL DIAGNOSIS.** By George W. Norris, A. B., M. D., and Henry R. M. Landis, A. B., M. D. Chapter on Transmission of Sounds Through the Chest, by Charles M. Montgomery, M. D., and a chapter on the Electrocardiograph in Heart Diseases, by Edward B. Krumhaar, Ph. D., M. D. Fifth edition; revised. 997 pages with 478 illustrations. Cloth. Price \$10.00. W. B. Saunders Company, Philadelphia and London, 1933.

As a basic text for the student as well as the practitioner, this work is especially good. The fifth edition has many revised chapters and much new material. Owing to the almost prohibitive cost at times for laboratory services, the emphasis on the old time methods of arriving at a diagnosis is timely. The laboratory is treated as a partner rather than a master. With the much advertised increase of cardiac disorders in the populace it is interesting to note the listing of functional tests, the relation of coronary diseases to the angina pectoris group, and the importance as well as the limits of the electrocardiograph in diagnosis. The limitations described in the third edition of the book were repeated in the fifth edition. It is disappointing to see no appreciable change in the small space allotted to the heart as a surgical risk. This is one of the biggest demands made on the internist and should merit a chapter in any book on physical diagnosis.



The introduction of the bronchoscope as an aid in diagnosing respiratory diseases, though brief, is interestingly presented.

The usefulness of the text is greatly enhanced by a thorough index.

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**THE JOY OF LIVING.** An autobiography by Dr. Franklin H. Martin. Two volumes. Profusely illustrated. Cloth. Price \$7.00. Doubleday, Doran and Company, Garden City, New York, 1933.

The story of a Wisconsin boy who journeyed to Chicago for his medical education, returning there to practice his profession, these volumes record the events in a busy life. Dr. Martin's biography, while somewhat lengthy and a bit too much given to detail, affords the student of medical history in the Chicago area, during the past half century, a book of very much interest.

The story of the founding of the American College of Surgeons is chronologically given and in much detail; the founding of that excellent journal, *Surgery, Gynecology and Obstetrics*, is characteristically portrayed, both of which accomplishments would seem to have been enough to occupy the time and attention of one busy man. Yet, when the World War came along, Dr. Martin found time intimately to engage in the preparation of its medical defense phases and became a most important figure in that activity. The book is a veritable history of the part that medicine played in that great conflict.

The two books are very readable and most informative.

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**A TEXT-BOOK OF PHYSIOLOGY.** By William H. Howell, Ph. D., M. D., Sc. D., LL. D. Emeritus Professor of Physiology in The Johns Hopkins University, Baltimore. Twelfth edition. Cloth, \$7.00 net. 1,132 pages, with 308 illustrations. Philadelphia and London: W. B. Saunders Company, 1933.

This book is a twelfth edition of Howell's Physiology which first appeared in 1905, since which time 39 reprintings have been made. That, in itself, tells the old story of a text-book in physiology which has stood the test of time. The revisions and rewritten subjects in this twelfth edition tend to clarify the subject material in such a way as to make it up-to-the-minute in authority. These new or rewritten subjects comprise the chemistry of muscle contraction, vision and hearing, blood, enzymes, liver and kidneys, endocrines, vitamins, nutritional conditions, water balance, as well as many other subjects. The scope covered by the subjects by so informed a person as Dr. Howell makes the text-book also a reference book for not only the student of physiology but for the practitioner as well. The evaluation of theories can be taken as final, making the book invaluable.

## SOCIETIES AND INSTITUTIONS

### INDIANA STATE MEDICAL ASSOCIATION

#### EXECUTIVE COMMITTEE

December 3, 1933.

Roll call showed the following present: W. H. Kennedy, M. D., chairman; H. H. Wheeler, M. D.; J. H. Weinstein, M. D.; O. O. Alexander, M. D.; E. E. Padgett, M. D.; A. F. Weyerbacher, M. D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary.

#### MEMBERSHIP REPORT

Number of members on November 30, 1933.....	2,680
Number of members on November 30, 1932.....	2,710
Loss over last year.....	30
Number of members on December 31, 1932.....	2,724

#### ACTIONS LEFT OVER FROM 1933 ANNUAL SESSION, FRENCH LICK

(1) Codification of Constitution and By-Laws. This is to be taken up at a later date. Letter of November 8 from

Albert Stump in regard to honorary membership to be placed on file on codification for future reference.

(2) Dr. Weinstein's recommendation in regard to University hospitals. Dr. Jett and Dr. Crockett working upon this subject at the present time. No new developments.

#### 1934 ANNUAL SESSION, INDIANAPOLIS

(1) Date of convention set for Tuesday, Wednesday and Thursday, October 9, 10 and 11, 1934. Monday, October 8, might be used for the health officers' day and preliminary registration day.

(2) Suggested preliminary outline of program:

#### Monday, October 8, 1934

Meeting of health officers and special societies such as:

1. Indiana Roentgen Society.
2. Indiana State Conference of Catholic Hospitals.
3. Indiana Academy of Ophthalmology and Otolaryngology.
4. Midwest Association of Anesthetists.
5. State Laboratory Directors.
6. Indiana State Hospital Association.
7. State Health Officers' Conference.

Monday Evening—A meeting with a speaking program of interest to all these groups.

#### Tuesday, October 9, 1934

Morning— Registration.  
Golf.

Afternoon—Meeting of House of Delegates.

Evening— Smoker and stag party.

#### Wednesday, October 10, 1934

Morning— General meetings.

Afternoon—Section meetings.

Evening— Meeting open to the public or dry clinics at the hospitals or theater party for physicians, their wives and families.

#### Thursday, October 11, 1934

Morning— General meeting.

Afternoon—Clinics or general meeting.

Evening— Banquet.

(3) Appointment of general chairman. John W. Carmack, M. D., of Indianapolis, appointed general chairman, who, along with Dr. Henry Leonard, 1934 president of the Indianapolis Medical Society, and Dr. J. S. McBride, secretary, will be in charge of all local arrangements for the meeting.

(4) Dr. E. N. Kime, chairman of the Program Committee for the Midwest Section of the American College of Physical Therapy, appeared before the committee to obtain an expression as to whether or not it would be satisfactory for the Midwest Section of the Congress to hold a meeting previous to the state meeting. It was decided that such a plan would not be feasible this year as the annual meeting of the Congress comes at the same time as the state association meeting.

#### MIDWINTER COUNCIL MEETING

Sunday, January 14, 1934, 10 a. m., has been set for mid-winter Council meeting.

#### SECRETARIES' CONFERENCE

Secretaries' Conference will be held Sunday, January 21, 1934, afternoon and evening. The following out-state speakers will be on the program:

N. B. VanEtten, M. D., New York City, Vice-Speaker of the House of Delegates of the American Medical Association and signer of the minority report of the Committee on the Costs of Medical Care.

H. Jackson Davis, M. D., Consultant in Medical Care, Federal Emergency Relief Administration, Albany, New York.

W. W. Bauer, M. D., Director, Bureau of Health and Public Instruction, American Medical Association, Chicago, Ill.

A. M. Schwitalla, S. J., Ph. D., Dean, St. Louis University School of Medicine, St. Louis, Mo.

#### WHAT IS A CLINIC

Dr. O. O. Alexander to prepare article upon this subject to be submitted to the editor of THE JOURNAL.

## INDIGENT SICK

(1) Correspondence between Dr. Weinstein and Dr. Olin West was reviewed by the committee.

(2) Vigo County Society. Plan submitted to Mr. Book, who has not yet passed upon it. He states, however, that he will do so just as soon as he can get to it, the relief director's office, of course, having been tremendously overworked in the last few weeks with the civil works program.

(3) Letter received from Mr. Book asking the county medical societies to cooperate with school officials in making a survey as to any undernourishment that may exist in school children. Secretary instructed to write a letter to Mr. Book stating that a committee had been appointed by the Advisory Health Council to work out a system for making this survey.

(4) Texas relief plan similar to Indiana plan based upon plan worked out in Indiana. Copy of this shown to members of the Executive Committee in order that it might be compared with the Indiana plan.

(5) Effect of civil works employment upon F. E. R. A. funds for the care of the indigent sick. Letter brought to the attention of the Executive Committee from Dr. J. M. Fleming, Elkhart County, stating that the civil works program will place many men at work who will be taken off of relief rolls and hence will not come under the F. E. R. A. regulations in regard to medical services. Dr. Fleming states that although taken off the relief rolls they still will not have money enough to pay their physicians. In answer to this letter Mr. Book, director of the Governor's Unemployment Relief Commission, writes: "I believe you are unduly fearful. I am inclined to think that most of the people who have the benefit of civil works employment will receive more income than they were accustomed to before their dependence on relief. These persons are to be removed from the relief rolls, and employment is not being limited to one person to a family. Likewise, these families are to receive the benefit of federal surplus food distribution until March 1, which means increased income."

(6) Fort Wayne Resolution. Resolution passed by Fort Wayne Medical Society appointing committee to make arrangements with township trustees for the care of the indigent sick brought to the attention of the Executive Committee. At the request of this committee Albert Stump, attorney for the Association, prepared an opinion which was sent to Mr. William Keane, attorney for the trustees, stating that it was his belief that a contract for medical care and attention on a monthly or annual basis with individual physicians was not valid.

(7) Hospital association complains about not receiving F. E. R. A. funds for hospital care of indigents. Copies of letters from the Indiana Hospital Association complaining about this brought to the attention of the committee.

(8) Difficulties in state in regard to F. E. R. A. work. Request received from Dr. Olin West that a statement in regard to the difficulties that are arising in the various states in regard to medical services rendered under F. E. R. A. regulations No. 7 be prepared and sent to him. This material is to be used by the officials of the American Medical Association in any further conferences they may have with governmental officials in charge of this work.

(9) Letters received from Nebraska, Detroit and Michigan thanking the headquarters office for sending material which is an aid to them in working out F. E. R. A. agreements in their communities.

(10) Civil Works Administration to put to work nurses who are unemployed. Secretary was instructed to find out exactly what this work contemplated and to see if any positions might be found in state institutions, etc., for unemployed physicians.

## IMMUNIZATION CAMPAIGN

(1) Criticisms.

(a) Letter of criticism in regard to this campaign from H. C. Ragsdale, M. D., Bedford, councillor of the Third District, brought to the attention of the committee. As this letter had been answered by various officers of the Association no further action was deemed necessary by the committee.

(b) Clark County sends formal notice that it is opposed to the campaign. Formal answer made to the Clark County

letter stating that as this campaign had been placed entirely in the hands of each local county medical society, if the Clark County Medical Society did not desire to undertake such a campaign the Executive Committee would back the Clark County Society in seeing that no such campaign is undertaken. However, the Executive Committee urges that each county society work out a plan to undertake this work.

(2) Letter from Dr. Harold Nugen, Auburn, secretary of the DeKalb County Medical Society, voicing the attitude of the profession in regard to the immunization campaign brought to the attention of the committee. The Executive Committee felt that Dr. Nugen's letter was very timely and very much to the point, and instructed that a copy of it should be sent to the director of the State Division of Public Health.

(3) Letter from Dr. Weinstein to Dr. Rice in regard to county societies where questions have arisen concerning immunization campaigns approved by the committee.

## HEALTH OFFICERS' REPORTS

Suggestion made at last meeting that health officers of each county make a report to their county medical society each year. Fact brought to light that 154 health officers are laymen. Executive Committee suggests that this point be borne in mind at the next session of the legislature so that legislation may be passed making it necessary for every health officer to be a physician.

## SURVEY OF MEDICAL FACILITIES IN INDIANA

Dr. Alex Cavins, of Terre Haute, will make recommendations concerning this to the next meeting of the Executive Committee. This survey is to be carried on under the direction of the State Health Council, an organization composed of groups interested in public health work. This is the old State Health Council, an informal conference group, and should not be confused with the new Advisory Health Council which has an official advisory capacity in connection with the State Division of Public Health.

## TREASURER

The treasurer reported that the contents of the safety deposit box had been moved to the Indiana National Bank.

## MEDICAL MEETINGS

Arrangements were made for members of the Executive Committee to attend medical meetings of the Eighth District Medical Society, the Clinton County Medical Society, and the Henry County Medical Society.

## CRITICISM OF JOURNAL ARTICLE IN REGARD TO GROUP HOSPITAL INSURANCE

Letter received from William Henry Walsh, M. D., past president of the American Hospital Association, criticising article that appeared in THE JOURNAL concerning group hospital insurance. Dr. Walsh's letter of criticism was answered in THE JOURNAL both by the president of the State Association and the editor of THE JOURNAL.

## KNOX COUNTY SITUATION

The members of the Executive Committee said that they would be very pleased to attend a meeting in Knox County in order to be of any aid possible if the local physicians and the District Councilor desire their aid.

## WHO CAN SIGN DEATH CERTIFICATES?

In answer to a question in regard to this, Albert Stump prepared an opinion which will appear in the Medico-Legal column of the January issue of THE JOURNAL.

## HONORARY MEMBERSHIP

(1) Are honorary members entitled to malpractice defense? Opinion of Albert Stump is that honorary members are not entitled to malpractice defense. "If there is no change made in the By-Laws to meet this classification of honorary members I do not believe that the honorary member would be entitled to medical defense. Section 7 of Chapter 12 of the By-Laws makes the payment of dues a condition upon which the right to defense depends."



(2) Does county society have to subscribe to THE JOURNAL for honorary member? Opinion is that if honorary member does not desire THE JOURNAL the society does not have to subscribe for him.

#### MEMBERSHIP REGISTER

The committee went on record favoring the publication of a membership roster as of December 1 in the December issue of the 1934 JOURNAL. This matter must come up before the next meeting of the Editorial Board and the Council for final approval.

#### MICHIGAN'S AFFLICTED CHILD LAW

Notice in regard to this, which appeared in *The Detroit Medical News*, brought to the attention of the Executive Committee. The committee instructed the secretary to obtain copies of the law to bring to the attention of the next meeting of the committee.

#### PAN-AMERICAN INSURANCE COMPANY

American Medical Association has no information in regard to this company which is said to be operating in Indiana, charging \$10.00 yearly premium for which a person gets \$10.00 a week for hospital care.

#### VETERANS' HOSPITALIZATION

(a) Letter received from Dr. E. H. Cary, former president of the American Medical Association, concerning veterans' hospitalization and the danger to the profession that will arise if Congress liberalizes the clause in the present act which would reinstate veterans' hospitalization for non-service connected disabilities. Dr. Cary's letter was referred to Dr. F. S. Crockett, a member of the Liaison Committee of the American Medical Association. Dr. Crockett's reply read to the committee. The Executive Committee refers the entire matter to the Veterans' Hospitalization Committee of the State Association for a plan of action and instructs it to work out details and to compose a proper letter to be sent to the United States senators and congressmen from Indiana.

(b) Members of special rating board of veterans' administration. Letter received giving names of special rating board of veterans' administration. Executive Committee suggested that this letter be sent to the chairman of the Committee on Veterans' Hospitalization.

#### GARNISHEE LAW

Suggestion made that the State Association interest itself in passing a workable garnishee law. The Executive Committee felt that the Association could have nothing whatever to do with such legislation.

#### PHYSICIANS' INCOMES

Report received from the Department of Treasury, State of Indiana, in regard to physicians' incomes for the tax period of May and June. Comment upon this report and figures appeared in the December number of THE JOURNAL.

#### STATE GROUP ECONOMIC MEETINGS

Suggestion made by F. C. Warnshuis, M.D., secretary of the Michigan State Medical Society, that group economic conferences be formed, composed of Ohio, Michigan, Illinois, Wisconsin and Indiana. The Executive Committee instructed the secretary to write to Dr. Warnshuis stating that the idea undoubtedly has some merit and asking him to go into detail concerning his ideas on such a conference.

#### POSTGRADUATE COURSE IN VANDERBURGH COUNTY

Request has been received from Vanderburgh County for a postgraduate course. This correspondence is to be turned over to the chairman of the 1934 Postgraduate Committee.

#### FIGURES IN REGARD TO FREE MEDICAL SERVICE

Dr. Wheeler suggests that figures should be obtained on how many people are taken care of free of charge by the medical profession in Indiana each year. The committee suggested that Dr. Wheeler work out a method whereby such figures could be obtained.

#### TUGWELL BILL, S. 1944

This bill, to prevent the manufacture and sale of adulterated or misbranded drugs and "to prevent the false advertisement of foods, drugs and cosmetics," was brought to the attention of the committee. This bill, according to its authors, would do more than any other piece of legislation to curb the illicit traffic of such notorious nostrums as Crazy Crystal Waters, Konjola, etc. Many provisions in this bill are opposed by many important commercial interests. The Grocery Manufacturers of America disapprove Senate Bill 1944, but approve the substitution of a bill which they feel will be properly effective.

#### THE JOURNAL

(1) Bids for printing THE JOURNAL for 1934. The Executive Committee authorized the executive secretary and the members of the committee who live in Indianapolis to make the best arrangement with the printers for publication of THE JOURNAL for 1934. Mr. H. R. Danner, president of the Wm. B. Burford Printing Company, appeared before the committee and spoke in regard to publication of THE JOURNAL for next year.

(2) Professional cards. The Executive Committee authorized the managing editor of THE JOURNAL to drop any card accounts that have run for a year and requests for payments have brought no response.

(3) Members solicit advertising. Page from Michigan Journal. This was referred to the Editorial Board.

(4) Request from editor of THE JOURNAL. Executive Committee O. K'd the purchase of a subscription to the state edition of *The Indianapolis Times* for the editor of THE JOURNAL.

(5) Drug store card discontinued. Following a resolution passed by a county medical society one card in THE JOURNAL has been discontinued.

(6) Professional card from dentist. No professional cards of dentists to be carried in THE JOURNAL.

#### MALPRACTICE CASES

Two cases reviewed by committee.

There being no further business, the meeting was adjourned.

#### BUREAU OF PUBLICITY

November 3, 1933.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D., and T. A. Hendricks, executive secretary.

Release for publication in Saturday morning papers, November 11, "Diphtheria Prevention," read and approved. This release is to be submitted to a pediatrician for a final check-up. Radio release, Saturday, October 28—"A Word to Hunters."

#### Reports on medical meetings:

September 20—Parke-Vermillion County Medical Society, Clinton, Indiana, "An Economic Health Program."

October 25—Eleventh District Medical Society, North Manchester, Indiana.

November 1—Thirteenth District Medical Society, South Bend, Indiana.

Radio releases supplied by the Bureau of Health and Public Instruction of the American Medical Association to be reviewed by a member of the bureau, and the corrected releases are to be presented to the bureau at its next meeting.

A letter was received from the president of the Indiana Congress of Parents and Teachers asking that copy be sent early for next two issues of the *Indiana Parent Teacher*, and saying that great interest is exhibited in our contributions.

Report received from the Better Business Bureau in regard to a so-called tuberculosis clinic that is being conducted in Indianapolis.

Letter received from the historian of the Association, approving the suggestion relative to obtaining the pictures of all

past presidents of the Indiana State Medical Association, and offering helpful suggestions.

A large number of newspaper clippings from Indiana newspapers, relating in a laudatory manner to members of two nationally known clinics, brought to the attention of the bureau. It is hoped by the bureau that the clinics themselves may modify the extreme statements which appear in these articles. The attention of the bureau also was called to a large number of articles that have appeared in the daily papers of Indiana in which members of these clinics speak upon subjects which are so visionary in nature that no one at the present time can have sufficient scientific knowledge to warrant such statements.

INDIANA DIVISION OF PUBLIC HEALTH

BUREAU OF COMMUNICABLE DISEASES

Monthly Report, November, 1933

As might be expected considering the season of the year, marked increases were noted in the incidence of all the more common reportable diseases, with the exception of typhoid fever. There was a total of 2,688 diseases reported over the entire state, all counties submitting either positive or negative reports.

A summary of the diseases from the urban and rural populations is given below:

Diseases	Total	Urban	Rural
Tuberculosis .....	129	91	38
Chickenpox .....	590	407	183
Measles .....	93	43	50
Searlet fever .....	900	364	536
Smallpox .....	12	4	8
Typhoid fever .....	41	15	26
Whooping cough .....	119	75	44
Diphtheria .....	489	182	307
Influenza .....	217	1	216
Pneumonia .....	58	0	58
Mumps .....	24	18	6
Poliomyelitis .....	4	1	3
Meningitis .....	8	6	2
Undulant fever .....	1	0	1
Encephalitis lethargica .....	3	0	3

SMALLPOX. Even with a marked increase of this disease as compared with the month of October, the total of twelve cases is very low. During November, 1932, thirty-one cases were reported, and during the corresponding month of 1931, seventy-six cases were recorded.

DIPHTHERIA. The totals for the incidence of diphtheria are still decidedly on an increase. Better than a 25% increase was noted for November as compared with last month when 335 cases occurred. Our records indicate that there were only 270 cases during November, 1932. The counties reporting the largest totals during the current month were: Marion, 46; Allen, 43; White, 27; Vigo, 26; and Tippecanoe, 25. During the month the State Epidemiologist, at the request of the local health authorities, conducted numerous investigations in various counties.

SCARLET FEVER. The most pronounced increase of any of the communicable diseases was shown in searlet fever. The total of 900 cases of this disease represents a 50% increase over the preceding month, and is more than triple the total of the month of November, 1932, when 243 cases were reported. The cases were more or less equally divided between the urban and rural areas.

TYPHOID FEVER. The total of 41 cases of typhoid fever reported during November represents a 25% decrease over the total for the month of October. With the continuance of cold weather the disease is due for a steady decline, as carriers do not go about spreading their infection so much during cold weather.

POLIOMYELITIS. The low prevalence of this disease was maintained during November when only four cases occurred, which total is the same as for October, 1932. Lake and Union counties each reported one case, and Marion County reported two.

MENINGITIS. This disease has remained fairly constant during the past several months. Again Marion County leads, this month the entire total of six cases occurring in Indianapolis, Marion County.

One case of undulant fever was reported from Carroll County; and Lake, Orange, and Owen counties each reported one case of encephalitis lethargica.

THURMAN B. RICE, M. D.

CARROLL COUNTY MEDICAL SOCIETY

The Carroll County Medical Society met December eighth at Delphi, at 1:30 p. m.

The afternoon program was composed as follows: Hemorrhage in Pregnancy, by Dr. A. M. Mendenhall, of Indianapolis; Toxemia of Pregnancy, by Dr. John Kelly, of Indianapolis; Management of Breech Presentation, by Dr. C. B. Burrows, of Frankfort; The doctor's duty in taking a history, having the patient return regularly, and in giving her instructions during the entire time of her pregnancy, were explained by Dr. Arthur Mieheli, of Indianapolis; and Dr. J. W. Jackson, of the Indiana Division of Public Health, talked on the new management of that body.

The evening program was arranged as follows: Prenatal Care and the Importance of an Understanding Between Patient and Doctor of the Fee to be Charged for Such Care, by Dr. E. O. Asher, of New Augusta; a moving picture "The Gift of Life" was presented by Bynum Legg, of the Indiana Division of Public Health; and Educating the Public in Better Obstetries was presented by Dr. A. M. Mendenhall.

Visiting physieians were: J. H. Reed, George Miller, and S. L. Magwell, of Logansport; J. C. Burkle, A. M. Baker, H. H. Ash, W. B. Matthews, and D. H. McKinney, of Lafayette; and F. M. Biddle, of Battle Ground.

At the business meeting the application for membership of Dr. M. C. Thomas was accepted by the society. Officers elected for 1934 by the society are Dr. W. G. Pippenger, Camden, president; Dr. J. R. McLaughlin, Burlington, vice-president; and Dr. E. H. Brubaker, Flora, secretary-treasurer.

E. H. BRUBAKER, M. D., *Secretary*.

CLINTON COUNTY MEDICAL SOCIETY

The Clinton County Medical Society met at the Coulter Hotel, Frankfort, December seventh, with Dr. John S. Ketcham, president, presiding.

Dr. H. H. Wheeler and Thomas A. Hendricks of Indianapolis, were our guests of the evening.

A communication from Dr. John S. Morrison, district director of the Council of Child Health and Maternal Welfare, was read and it was moved and seconded that the incoming president appoint three members to have full charge of any campaign we might put on in regard to immunization of children. After his election, Dr. Boulden appointed Drs. I. E. Carlyle, J. A. VanKirk, and N. B. Combs as the committee in charge. Dr. C. A. Robison, member of a like committee with the Forty and Eight division of the American Legion, was invited to attend the meeting of the committee.

A communication was read by the secretary to a lay organization in which he attempted to outline our position in any publicity campaign in which he demanded absolute maintenance of the rule of patient and family physieian and in order to further that relationship all programs having the approval of our society must have the approval of the local members in the field concerned by the program.

It was moved and seconded that that was and is the position of the Clinton County Medical Society and that the relationship of physician and patient must not be disturbed. Motion carried unanimously.

An invitation was received from the Carroll County Medical Society inviting our members to attend a series of postgraduate lectures on obstetrics, December eighth.



Election of officers: Dr. Melville F. Boulden, Frankfort, president; Dr. H. R. Royster, Frankfort, vice-president; Dr. Ivan E. Carlyle, Sedalia, secretary-treasurer.

IVAN E. CARLYLE, *Secretary-Treasurer.*

#### RIPLEY COUNTY MEDICAL SOCIETY

The Ripley County Medical Society met in the assembly room of the Osgood Public Library, November 8, 1933, 7:30 p. m. Meeting called to order by President T. M. Brenton. Dr. Brenton read a letter from Mrs. Lowell Hunter, president, Woman's Auxiliary, Ripley County, requesting December meeting be turned over to Auxiliary. Motion by Dr. R. L. Compton, seconded by Dr. R. Lee Smith, that ladies be thanked for their invitation, and that December, 1933, meeting be turned over to Auxiliary in its entirety. Motion carried.

At this point of business, Dr. R. L. Compton, of Osgood, presented his resignation as secretary-treasurer of the Ripley County Medical Society and made a motion that resignation be accepted. Motion lost because of no second. After explanation by Dr. Compton, and discussion by group, M. Joseph Coomes, M. D., of Versailles, made motion that the resignation be accepted to date 30 days from date of this meeting. Motion seconded by L. H. Hopkins, M. D., of Versailles, and carried.

After the above business was disposed of, President T. M. Brenton, M. D., called for nominations for officers for 1934. L. H. Hopkins, M. D., was nominated for president. Max Adams, M. D., was nominated for secretary. Election will take place at December meeting.

When business was completed, Dr. E. R. Gernert, of Louisville, Ky., gave a very interesting and instructive talk on "Tuberculosis," with special reference to treatment. Dr. Gernert is tuberculosis examiner for clinics of Louisville and vicinity. Dr. Gernert is associated in his work with Dr. O. O. Miller, of Louisville, who closed the discussion. Dr. Miller's remarks were very interesting and to the point.

Guest physicians were present from Madison, North Vernon, and Greensburg.

R. L. COMPTON, M. D.,  
*Secretary-Treasurer.*

#### ST. JOSEPH COUNTY MEDICAL SOCIETY

The St. Joseph County Medical Society was called to order by President Graham at 8:45 P. M., October 24, 1933, in the medical room of the library, with 39 members and 1 guest present.

Dr. Sennett, Chairman of the Public Relations Committee, reported that the committee still wished more time before making a final report on the Irradiation of Milk. Dr. Sennett also reported that he had an appointment with Miss Boylan, head of the Federal Relief, to discuss the medical care of the indigent sick, after which the committee would be able to make a report.

The subject of who were eligible for treatment at the Children's Dispensary, now that men were getting back to work, was brought up for discussion. Dr. Miller stated that the Children's Dispensary Medical Staff had already appointed a committee to look into this matter, and suggested that the Children's Dispensary Committee confer with Public Relations Committee.

The paper of the evening on "Diseases of the New-Born" was given by Dr. Milo Miller. Dr. Miller gave his paper as a part of an educational campaign put on by a committee appointed by the State, of which he is a member.

The paper was discussed by Drs. Knode, Bosenbury, Pyle, Bickel, Hyde and Marcus Lyon.

Adjourned.

The St. Joseph County Medical Society met in the medical room of the library, Tuesday, November 7, 1933, at 8:30 P. M., with President Graham in the chair. Sixty members and 6 guests were present.

Miss Lucille Boylan, head of the Federal Relief, spoke on the "Emergency Medical Aid to the Indigent." Miss Boylan defined what would be considered as an emergency requiring medical aid to an indigent person. She gave the details as to payment on a fee such as \$.50 for an office call, \$1.00 for a home call, and \$15.00 for an obstetrical case. Questions were asked and the subject discussed. Dr. Sullivan moved that Miss Boylan's suggestion be accepted and that the details be worked out later with her by the Public Relations Committee. This was seconded by Dr. Sandock and carried unanimously.

Adjourned.

The 48th Annual Meeting of the St. Joseph County Medical Society was held November 15, 1933.

A clinical meeting was held at St. Joseph Hospital from 10:00 A. M. to 12:00 M. under the direction of Dr. Edgar H. Myers.

The afternoon meeting was held in the Rotary Room of the Oliver Hotel at 2:30 P. M. The papers given were: "The Relation of Respiratory Allergy to Infection in Respiratory Tract," by Samuel M. Feinberg, M. D., Chicago, Illinois; "Extrapneumal Motor Diseases including Encephalitis," by Victor E. Gonda, M. D., Chicago, Illinois; and "Subnormalities Due to Hyperthyroidism," by Edwin P. Sloan, M. D., Bloomington, Illinois.

The evening session was held in the Rotary Room of the Oliver Hotel. After dinner, which was served at 6:30 P. M., and at which visiting members of the medical profession were guests of the St. Joseph County Medical Society, a paper, "Allergic Conditions of the Skin," was presented by Louis A. Brunsting, M. D., of the Department of Dermatology, Mayo Clinic, Rochester, Minn., illustrating his talk by lantern slides. The paper was discussed by Dr. Feinberg of Chicago.

There were present 87 members and 33 guests.

The meeting adjourned at 9:30 P. M. following a vote of thanks by the president and members.

November 28, 1933.

The St. Joseph County Medical Society met at 8:30 p. m., Tuesday, November 28, with President Graham in the chair. Fifty-eight members and four guests were present.

The secretary read letters sent by Thomas A. Hendricks, Executive Secretary of the Indiana State Medical Association, relative to the interest that a local corporation is taking in a group medical plan. This matter was discussed by Drs. Grillo, Bosenbury, and Fish, and turned over to the Public Relations Committee for investigation and report.

Relative to an inquiry by the assistant secretary concerning who is authorized to sign death certificates in Indiana, a letter from Thomas A. Hendricks was read stating that this matter had been referred to Albert Stump, attorney for the Indiana State Medical Association, and V. K. Harvey, M. D., Director State Division of Public Health.

Applications for membership in the St. Joseph County Medical Society were received from Drs. Herbert Wurster and E. M. Sirlin. These applications were referred to the Board of Censors.

REPORT OF COMMITTEES. Dr. Milo Miller, District Chairman of the Child Welfare Committee, gave a résumé of the state-wide campaign of immunization against diphtheria and smallpox being undertaken by the State Association and the State Division of Public Health. Dr. Sullivan thought that publicity over the radio could be arranged as an emergency in this campaign for twice a week, such talks to be given by men specially fitted for it.

THE BUSINESS OF THE EVENING. The report of the Public Relations Committee on Indigent Medical Care was taken up by Dr. Sennett, chairman of the committee. Dr. Sennett outlined the details of this plan as it seemed best to present it to Mr. Kaylor, head of the federal relief for the county. It was moved by Dr. Cassidy and seconded by Dr. Helmen that Dr. Sennett's report of the Public Relations Committee on Indigent Medical Care be accepted. Carried unanimously.

December 5, 1933.

The annual business meeting of the St. Joseph County Medical Society was held in the Oliver Hotel, December 5, 1933, with seventy members present.

Dr. Milo Miller, Chairman of the Child Welfare Committee, moved that permission be granted the Committee on Immunization to give toxoid and vaccinations to the indigent in groups in communities where the local doctors or health officers consider this method advisable. This motion was seconded by Dr. Helmen and carried unanimously.

The officers elected for 1934 were as follows:

President, Dr. J. V. Cassady, vice-president, Dr. C. C. Terry; secretary-treasurer, Dr. Martha Lyon; assistant secretary-treasurer, Dr. D. W. Frash.

Delegates to the Indiana State Medical Association—First delegate, Dr. A. S. Giordano; alternate, Dr. H. D. Pyle; second delegate, Dr. M. D. Wygant; alternate, Dr. G. M. Rosenheimer.

One member of the Board of Censors, Dr. H. J. Graham, was elected for three years.

Public Relations Committee—Dr. C. M. Sennett, chairman, Dr. E. S. Blackburn, Dr. I. Sandock, Dr. J. E. McMeel, Dr. Milo Miller.

December 12, 1933.

The St. Joseph County Medical Society met December 12, 1933, at 8:30 p. m., with President Graham in the chair. Twenty-six members and three guests were present.

The secretary presented letters from Attorney Stump and Dr. Verne K. Harvey relative to the signing of death certificates. It was moved and seconded to refer these letters to the incoming chairman of the legislative committee.

Dr. Berteling presented a resolution thanking the outgoing officers, extending felicitations to the incoming officers and offering them cooperation during the coming year. His resolution included: "that we feel deeply the loss of our former secretary-treasurer, Dr. R. B. Dugdale, now stricken with a lingering illness, whose incumbency during the past two decades so materially aided in the cohesion of the Society, without which any organization would soon deteriorate and cease to function." This motion was seconded by several and carried unanimously.

The paper of the evening, "Army Medical Service in Action," was given by Dr. P. C. Traver by means of three reels of motion pictures shown by Lieutenant Firmin.

MARTHA BREWER LYON, M. D.,  
Assistant Secretary-Treasurer.

#### TIPPECANOE COUNTY MEDICAL SOCIETY

The annual business meeting of the Tippecanoe County Medical Society was held at the Lafayette Club, December fourteenth.

Officers were elected: President, W. W. Washburn, Lafayette; vice-president, G. R. Clayton, Lafayette; secretary, J. C. Burkle (re-elected), Lafayette; treasurer, Charles Hupe (re-elected), Lafayette; delegates for two years, Earl Van Reed, Lafayette, and G. A. Thomas, Lafayette; alternate delegates for two years, O. R. McCoy, Romney, and R. R. Calvert, Lafayette; censor for three years, A. J. Bauer (re-elected), Lafayette; elected to honorary membership, Dr. Charles Hupe, Lafayette, and Dr. F. B. Thompson, Lafayette.

A county survey of tuberculosis was presented, a definite plan outlined by Dr. W. H. Mytinger and the Society voted adoption of the plan.

President Thomas reported a meeting with our county judges by Drs. Crockett and Thomas; the interview was very favorably received and a committee to work with the judges in placing hospital cases will be appointed.

Letters from the State Child and Maternal Welfare Committee were presented and commented upon by District Chairman Morrison.

A general discussion of the immunization campaign for diphtheria and smallpox was carried on but no definite action was taken by the society.

The society adjourned, to meet as a committee of the whole, Dr. W. W. Washburn presiding. A committee was appointed to have an early meeting, bring forth definite plans for the immunization campaign, and present them before an early called meeting of the committee as a whole for definite action. The committee is composed of Drs. Van Reed, J. S. Morrison, M. M. Lairy, and F. P. Hunter.

J. C. BURKLE, M. D., Secretary.

#### LAKE COUNTY MEDICAL SOCIETY

The annual dinner meeting of the Lake County Medical Society was held at the Gary Hotel, December 14, 1933, President Jones presiding. Following the dinner a business session was held.

The minutes of the November meeting as they appeared in THE JOURNAL were approved.

Ballot was had on the following applications: Susie Thompson, W. G. Bailey and S. R. Blackwell, all of Gary; they were declared duly elected.

Applications were read as follows: L. E. Dupes, Hobart; M. B. Gevirtz, E. L. Eggersand, S. L. Brown, of Hammond; M. R. Basecomb, Calumet City; A. J. Dian, Gary; A. A. Ross, E. S. Dickey, E. L. Levin, F. H. Mervis and A. R. Episcopo, all of East Chicago.

The report of the secretary-treasurer was read and approved. President Jones presented his "swan song" in a very brief manner as a matter of economizing time.

The secretary introduced a resolution in the matter of members of this society engaging in health insurance plans not approved by the Executive Committee of the State Association. Same is hereto appended. The chair announced that the resolution would be published in the January *Bulletin*, same to be voted on at the January meeting.

The annual election was then announced, resulting as follows: President-elect, J. M. White; secretary-treasurer, E. M. Shanklin. Councilors, four years: J. R. Doty, E. S. Jones. Councilor, one year: Ray Elledge. Delegates: J. R. Pugh, J. M. White, C. R. Pettibone, G. L. Ver Plank. Alternates: H. W. Eggers, B. F. Gumbiner, F. A. Gutierrez, T. W. Oberlin.

The entertainment features of the evening were then announced. As per his usual custom "Jimmy" White, the new president-elect, sang a group of songs, receiving his usual ovation at the conclusion of his final number.

One of our newest members, Herman Clay, presented two vocal numbers, proving that we have added to our list of entertainers one who is fully capable of providing a real entertainment.

Following the song service the chair presented Dr. Robert F. Liseher, of Mascoutah, Illinois, who spoke on his experiences as a country doctor. Dr. Liseher proved that in addition to being a keen observer he is a philosopher. Possessed of a keen insight into the thing we commonly know as "Life," he carried his hearers through a recital of the doings of a country doctor of the old school. He did not fail to point out many of the inconsistencies of the "city fellers," nor did he overlook that he and his confreres of the rural districts were possessed of many short-comings. His talk was richly spiced by a number of good stories concerning his professional experiences, many of which were related in rhyme. His presentation was accorded a most vociferous reception and he was warmly thanked by the chair for having provided such an excellent entertainment.

The attendance broke all records for the society, more than one hundred fifty members being present in addition to several guests. Many of those present took occasion to combine the annual dinner observance with a celebration of the "Personal Liberty" so recently restored to us. Hence a good time was had by all.

E. B. JONES, President.  
E. M. SHANKLIN, Secretary.



# THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

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## ORIGINAL ARTICLES

### MANAGEMENT OF DIABETES\*

J. H. WARVEL, M. D.  
INDIANAPOLIS

There have been many radical changes in the dietetic treatment of diabetes during the last thirty years. Prior to the discovery of insulin it was necessary to use low carbohydrate and low caloric diets in all except the mildest of cases. Many of these diets were of insufficient quantity to maintain the patient's weight and strength, and were oftentimes unpalatable and quite monotonous in character. The fat content was high, in order to raise the caloric content, and in severe cases predisposed to bring about acidosis very easily. The patients themselves were in many instances semi-invalids, and were inclined to "break" their limited diets. During the past ten years, with the aid of insulin, more generous diets can be taken, and the amount of carbohydrate is fairly comparable to that in the diet of normal individuals.

Today most everyone giving special attention to the treatment of diabetes has his own ideas as to the proportion of carbohydrate, protein, and fat which forms the most suitable diet for these patients. The formulae vary considerably, but all work out quite successfully in the hands of different investigators. The prime objective in any type of treatment is to maintain the patient's weight and strength, prevent the many complications of the disease, and to control the hyperglycemia and glycosuria as much as possible. Patients so managed may carry out active, happy, and useful lives.

#### DIET

The selection of the proper diet is the first essential in the treatment of any diabetic. The physician in general practice is oftentimes unable to place his patients on weighed diets, and can only roughly outline those foods which the patient may use. The *quantity* of the foods allowed is frequently overlooked, and for this reason constancy of diet is lacking. This latter is one of the most common causes for failure in treatment. Formerly

many physicians were of the opinion that with insulin less attention need be given to dietary details; however, this is contrary to the fact as demonstrated in modern treatment. The diet of patients using insulin must be carefully controlled at all times in order to prevent either hypoglycemic reactions, or excessively high blood sugars, and glycosuria. Careful balancing of diet and insulin is absolutely necessary to obtain the best results.

When insulin first became available many physicians were hesitant about using it as freely as they should. There was a fear of insulin overdosage, anaphylactic reactions, and also the idea that hypodermatic medication could not be properly carried out by the patients themselves. There was also a very vague understanding as to the determination of dosage and other details. Today, however, these ideas are changed considerably, and the physician is using insulin correctly, not only in the treatment of diabetes, but in many other conditions, such as acidosis of different types, undernutrition cases, and various skin disorders.

The incidence of diabetes has shown a gradual increase in the last ten years. This increase is possibly more apparent than real, and is more likely due to a more carefully conducted examination of all patients, routine health examinations, and investigations carried out by various life insurance companies in examining their applicants and policyholders. The routine blood and urine studies which are made in hospitals today also bring to light many otherwise overlooked cases of diabetes. The disease is more common in females than in males. Most cases are discovered in obese patients at about the fiftieth year of life. The Jewish race is the one most commonly affected. The number of colored people with diabetes is on the increase. Diabetes is also more common in children than it was formerly thought to be.

#### MORTALITY RATE

The mortality rate has increased since the advent of insulin. This is largely due to the method of compiling death returns. Frequently a diabetic of fifty years past dies of pneumonia, coronary occlusion, or nephritis, and diabetes is erroneously given as the primary cause of death. This greatly augments the death rate in diabetes. Most diabetics at the present time succumb to the numerous complicating lesions which result from generalized arteriosclerotic processes. The most frequent of

\* Presented before the annual session of the Indiana State Medical Association at French Lick, September, 1933.

these complications are gangrene, coronary thrombosis, apoplexy, and nephritis. Coma as a cause of death is on the decrease. The mortality rate in coma has dropped from about ninety-five per cent to less than ten per cent in some clinics. The younger diabetic is living longer than formerly, because with insulin he can gain in tolerance, and recover from the acidosis which was formerly fatal in these cases following any type of infection. The child diabetic was formerly considered the most severe of diabetics, but it seems at the present time that the prognosis in these cases is probably better than in the older patients. It is likely that mortality statistics in diabetics of all ages will show a marked change during the next thirty years. This is certainly true if proper dietary control and insulin will prevent the onset or arrest the further development of arteriosclerosis.

DIAGNOSIS

The diagnosis of diabetes is in most instances quite easy to establish. Polydipsia, polyphagia, and polyuria with glycosuria and the elevated blood sugar content, completes the picture. Occasionally some endocrine lesion may mimic true diabetes and require various laboratory studies to differentiate these conditions. A glycosuria due to other causes may also simulate diabetes, but blood sugar estimations, or the glucose tolerance test will establish the correct diagnosis in most instances. Subjective symptoms which are often related by the patient, and which are not associated in the minds of a physician with the disease, are tinnitus, disturbances of taste and smell, failing vision, vague digestive symptoms, loss of appetite, cramps and paresthesias of the legs and feet, which are often described by the patient as due to "poor circulation." It is surprising how frequently patients with such complaints are found to be true diabetics.

The proper selection of a diet is not difficult if the physician will only take the time to give it a little study. A weighed diet is the most satisfactory in any case, and is absolutely essential in the treatment of a child diabetic, or in older patients presenting some complication of the disease. Patients should have a diet which contains at least one hundred grams of carbohydrate per day. The protein content should be about one gram per kilogram of body weight per day, and the fat sufficient to bring the caloric content above the patient's basal requirement. Usually fifteen to twenty-five per cent above the basal requirement is most satisfactory to the patient.

Determination of diet for a patient weighing 140 lbs. (64 kilograms.)

64 × 25 = 1,600 calories.

Carbohydrate. .100 grams = 400 calories

Protein . . . . . 64 grams = 256 calories

Fat . . . . . 135 grams = 1,215 calories

1,871 calories

or 17% in excess of basal requirement.

In children the protein requirement may be from one and one-half to four grams per kilogram of body weight per day. The younger the child, the greater the need for protein.

The physician, for numerous reasons, is frequently unable to place his patients on such weighed diets, and must resort to measured diets. These work out very well in most of the older patients if no complications exist. During the last four years many of our patients have been unable to purchase scales, and much to our surprise with measured diets have progressed about as well as our patients who are using carefully weighed diets. The following is an example of a measured diet which we have used in an adult patient weighing from 125 to 140 lbs.

BREAKFAST

Food	Household Measure	Grams	Cho.	Pro.	Fat	Cals.
Orange.....	¾ average size.....	100	10.0	.....	.....	.....
Rolled oats....	1 heaping tablespoonful ..	40	6.6	2.0	0.8	.....
(cooked)						
Egg.....	One.....	59	.....	6.0	6.0	.....
Bacon.....	Two crisp strips (4½" long) ..	12	.....	4.5	6.0	.....
Proteo bread....	One slice.....	20	3.8	4.8	1.6	.....
Butter.....	1¾ squares ¼" thick.....	18	.....	.....	14.0	.....
Cream (19%)....	3 ounces (6 tablespoonfuls) ..	90	4.5	2.7	18.0	.....
Coffee						
			24.9	20.0	46.4	597

DINNER

Food	Household Measure	Grams	Cho.	Pro.	Fat	Cals.
5% vegetable....	¾ cupful.....	100	3.0	1.0	.....	.....
5% vegetable....	¾ cupful.....	100	3.0	1.0	.....	.....
Meat (Beef or Pork).....	Thin slice 4"x4"x¼".....	50	.....	10.0	7.5	.....
White bread.....	½ average slice.....	15	8.0	2.0	.....	.....
Butter.....	2 squares ¼" thick.....	20	.....	.....	16.0	.....
Milk.....	½ glass.....	125	6.2	3.7	5.0	.....
Cream (19%)....	3 ounces (6 tablespoonfuls) ..	90	4.5	2.7	18.0	.....
Coffee or tea						
			24.7	20.4	46.5	599

SUPPER

Food	Household Measure	Grams	Cho.	Pro.	Fat	Cals.
5% vegetable....	1½ cupful.....	200	6.0	2.0	.....	.....
5% vegetable....	¾ cupful.....	100	3.0	1.0	.....	.....
Potato.....	1 helping size of egg.....	50	10.0	1.0	.....	.....
Meat (Beef or Pork).....	1 portion 4"x2½"x¼".....	50	.....	10.0	9.5	.....
Proteo bread....	1 slice.....	20	3.8	4.8	1.6	.....
Butter.....	3 squares ¼" thick.....	30	.....	.....	24.0	.....
Cream (19%)....	2 ounces (4 tablespoonfuls) ..	60	3.0	1.8	11.4	.....
Coffee or tea						
			25.8	20.6	46.5	604

NOTE: Fruit may be substituted for potato: ¾ orange, ½ grapefruit, or 1 average size peach						
TOTAL DIET.....			Cho.	Pro.	Fat	Cals.
			75.4	61.0	139.4	1,800

This diet contains approximately 75 grams of carbohydrate, 60 grams of protein, and 140 grams of fat, or about 1,800 calories. The meats and vegetables in this diet may be varied to suit the individual taste, and thus prevent loss of appetite from too monotonous a dietary. Gluten bread is not used, because it varies greatly in both carbohydrate and protein content. The amount of glucose derived from 100 grams of this bread is just as great as that available from 100 grams of ordinary white bread. The carbohydrate content of white bread, rye bread, and whole wheat bread are about the same. In the more severe cases where white bread can not be taken in reasonable quantity by the patient, we use such special flours as Lister's, or McDowell's diaban flour. Recently we have been



using a special bread called Proteo, made by the Proteo Products Company, which is quite palatable, and has less than one-half the carbohydrate content of white bread. We find patients do not tire of it so easily, and it is no more expensive to the patient than it would be to purchase a special flour and prepare the bread in his own home.

Some physicians fail to restrict fruits, although the sugar content varies from six to twenty per cent. Frequently we see patients whose physician has advised them that they may use honey. This food contains about 82 per cent of sugar, and can not be tolerated much better than ordinary sugar. Potatoes and white bread may be allowed in limited quantities in both the weighed and measured diets.

Insulin is the only standardized product which is effective in increasing the sugar-utilizing capacity of a diabetic. Like all powerful and specific drugs, it must be used systematically, or harm as well as good can result from its use. The dosage is quickly and easily worked out on hospitalized cases when blood sugar tests and quantitative urinalyses are available. The following rules of dosage will give fairly satisfactory results in office or home treated cases.

Rule 1. Determine the number of grams of sugar wasted in both the 12-hour day and 12-hour night specimen of urine. Allow one unit of insulin for each two grams of urinary sugar wasted.

12-hour day urine—2,000 c.c.s.—1% of sugar = 20 grams wastage.

12-hour night urine—1,000 c.c.s.—1% of sugar = 10 grams wastage.

Total wastage, 30 grams.

$30 \div 2 = 15$  units of insulin required.

For example, if the 12-hour day specimen consists of 2,000 c.c.s. of urine, and contains one per cent of sugar, or twenty grams wastage, and the night 12-hour sample of 1,000 c.c.s. contains one per cent of sugar, or ten grams wastage, the patient should have fifteen units of insulin the following day while continuing on the same diet. This could be given in a dosage of ten units before breakfast, and five units before supper, or five units before each meal.

Rule 2. This rule is applicable in cases where quantitative urinalyses are not available.

Six-hour collections of urine are made as follows: From 6 A.M. to 12 noon; from 12 noon to 6 P.M.; from 6 P.M. to 12 midnight; from 12 midnight to 6 A.M.

6 A.M. to 12 N.—

Fehling's red (2 to 10%) = 15 units before breakfast.

12 N. to 6 P.M.—

Fehling's green ( $\frac{1}{2}$  to 1%) = 5 units before dinner.

6 P.M. to 12 M.—

Fehling's yellow (1 to 2%) = 10 units before supper.

12 M. to 6 A.M.—

Fehling's blue (neg.) = no insulin during night.

The amount of urine voided in each time interval is measured by the patient, and the four different specimens brought to the physician's office. Each sample is tested separately, using 5 c.c.s. of Fehling's solution, and adding eight drops of each urine sample to the boiling test solution. If the test shows red, the patient should have fifteen units of insulin before the preceding collection interval, ten units if the solution turns yellow, and only five units if the solution turns green. No insulin is given at any meal preceding the collection interval if the testing solution remains blue in color. The amount of Fehling's solution used, the number of drops of urine added, and the time of boiling must be kept constant in these examinations. The quantity of urine voided in each collection interval will also influence greatly the amount of insulin required. Each of these rules are rather crude, and a few units of insulin more or less may have to be allowed to obtain the best results. However, they will serve fairly well in the treatment of cases which can not be hospitalized for dietary instruction.

Insulin should be given fifteen to thirty minutes before meals. The size of the dosage varies greatly, depending upon the diet and the severity of the diabetes. When meals are equally divided, the larger dose is usually given before breakfast, the smallest dose at noon, and the medium-sized dose at supper. Most patients quickly master the technique of insulin administration. Children seven or eight years of age pride themselves on their ability to take their injections properly. Each patient should be taught the symptoms of insulin-overdosage, and instructed in the amount and type of sugar which they should take to relieve these reactions. Insulin should not be given to an uncomplicated case until the patient has had ten to fourteen days' trial on a constant diet. Following this test period one can tell much more about the sugar tolerance of the patient, and thus determine if insulin is actually necessary. When the patient is finally regulated as to the proper diet and insulin dosage to render the urine sugar-free, blood sugar examinations will help to obtain a more perfect balance of insulin and diet. Regardless of the length of time insulin is given, it can only do good in promoting the utilization of glucose. In many of the milder cases it need only be taken for a few months or years, as patients gain sugar tolerance as long as their diabetes is under control. Many patients gain so rapidly in tolerance by using insulin that they can oftentimes take double the amount of carbohydrate in their diets in the course of a few months. The insulin can then oftentimes be gradually withdrawn if the patient will continue with his weighed diets and report regularly to his physician for blood and urine examinations.

Numerous products for oral administration in the treatment of diabetes are now on the market, and hundreds of research preparations have been given extensive trial by numerous workers. However, none as yet have been found which will increase the sugar-burning capacity of a stabilized or perfectly controlled diabetic. It is hoped that some such product will be discovered, and further research work is being carried out in numerous institutions at this time. Possibly in another decade there will be a reliable oral medication for the treatment of these patients.

#### COMA

The most common complication in the child diabetic is coma, which appears as a result of improper diet, lack of sufficient insulin, or as a result of infections which precipitate acidosis. In the young adult diabetic, tuberculosis, hyperthyroidism, and infections of various kinds are common. In the older diabetic, cataract, retinitis, cholecystitis, arteriosclerosis, and its many sequelae are to be expected. The best treatment is good diabetic management so as to prevent these complications as much as possible. Infections should be promptly treated and eradicated if possible. Frequent and complete physical examinations should be carried out to determine the onset or the advancement of such conditions as nephritis, coronary sclerosis, cataract, and retinitis. The proper care of the diet, and rigid rules of hygiene will often prevent many of the more severe complications of the disease.

Coma is still quite common, especially in younger diabetics, but as previously stated, the mortality rate is dropping rapidly, because of the more scientific use of insulin in this condition. Insulin is a specific in diabetic acidosis or coma. Frequently diabetes is discovered during the first attack of acidosis or coma, and in this case is excusable; but in a known diabetic under treatment it should not occur. The symptoms of diabetic acidosis are well known to every physician. In the early stages it may mimic acute gastritis, cholecystitis, or appendicitis. Whenever nausea, vomiting, abdominal pain, and leukocytosis are encountered in a diabetic patient, one should make sure that it is not acidosis before attempting any operative procedures. Occasionally acidosis may precede some abdominal condition demanding surgery, and if so the acidosis should be treated first, and if the symptoms still persist, then one can safely proceed with whatever operative work is necessary. The treatment of this condition is best carried out in the hospital, and consists of large and rather frequent doses of insulin. The average adult dose in our experience during the first twenty-four hours of acidosis, is about 240 units. In children during the first twenty-four hours of acidosis, our average dose has been 115 units. An adult patient may be given fifty units when first seen, forty units in an hour, and thirty units in a third hour. It is advisable to make blood sugar examinations every second or third hour dur-

ing the first day of treatment. Urinary examinations for sugar, acetone, and diacetic acid should be made every hour. If after three or four hours of treatment the patient is improving, the size and frequency of the insulin dosage can be materially diminished. In children in the absence of infection ten unit dosage every hour for a few hours may bring about a startling improvement. One child only seventeen months of age was relieved from a rather deep coma by the administration of only 13 units of insulin in a period of four hours. There are no hard and fast rules of dosage in coma. Much depends on the clinical condition of the patient, and the results of the blood and urine examinations.

In addition to insulin these patients need fluids, because they are markedly dehydrated. Normal salt solution, or Hartman's solution, 500 to 1,000 c.c.s intravenously, with or without glucose, may be given every six to eight hours during the first day. Fluids by hypodermoclysis and proctoclysis are given to the extent of 3,000 to 5,000 c.c.s during the first twenty-four hours. Supportive treatment to the heart and kidneys is oftentimes necessary. Gastric lavage should be done routinely, unless the patient is in a very critical condition. Following recovery from coma, a gradual resumption of foods, with a balancing of the insulin dosage can be carried out.

#### SURGERY

Surgery on diabetic patients may now be carried out with much greater safety than before insulin became available. However, it is still with these surgical cases that one encounters the highest mortality rates. This is because of the fact that much of this surgery is done on older diabetics who present gangrenous lesions of various types. These patients have arteriosclerotic heart disease, chronic nephritis, and oftentimes show the ravages of longstanding diabetes. They would be very poor surgical risks, even though the complicating factor of their diabetes were not present. Their tissues withstand infection very poorly. Quite a few of them succumb to post-operative pneumonia, or myocardial failure. In the younger diabetics most major surgical procedures can be carried out with a fair degree of safety. Whenever possible, sufficient time should be allowed to prepare these cases for surgery, and close co-operation between the surgeon and internist is necessary both before and after surgery.

Failure of treatment in diabetes oftentimes results because the patient will not adhere to a constant diet as outlined by his physician. Occasionally it may be the result of the improper use of insulin. In still other cases, ignorance on the part of the patient because his doctor has not taken the time or patience to properly instruct him in regard to his disease may result in a serious or fatal outcome. The physician must go into detail in regard to diet, urine testing, the technique of insulin ad-



ministration, and many other points which are oftentimes considered trivial, if he is to have the best co-operation from his patients. He must advise the patient as to the causes and early symptoms of acidosis, and how quickly to combat this condition if it should occur. These patients must also be given definite instructions as to body hygiene; especially must they be warned of the dangers of cutting corns and callouses. They must also be advised how to properly care for the nails, in order to prevent infections which may precipitate gangrene. They oftentimes need advice as to the selection of proper clothing and shoes.

The physician must constantly be on the lookout for focal infection in the teeth, tonsils, sinuses, appendix, or gall bladder, as any of these predispose to make the diabetes more severe. These patients need advice as to work, play, and rest, and this differs in each individual case. When all of these points have been carefully gone over with the patient; the physician will be more than gratified with the results of his labor. The properly controlled diabetic seems to enjoy better health than most so-called normal people. Constant encouragement by the physician as well as by members of the patient's family is necessary at all times. Diabetes today is more easily managed than almost any other chronic disease, and its proper treatment allows for excellent health and longevity for these patients.

### DISCUSSION

GAYLE J. HUNT, M. D., Richmond: In the management of diabetic patients, the diet is one of the chief factors to be considered. Dr. Warvel's outline of measured diets should be very useful in many cases, chiefly because many patients will measure their food because of the simplicity of the process, when it would be almost impossible for them accurately to weigh out the different portions of their diet. Since measured diets have been found beneficial in many instances, I believe it is a point to remember in the uncomplicated adult diabetic case. The quantity of food consumed is as important as the kind of food. Meat or protein does not seem to the average patient to contain any sugar, yet since a considerable portion is ultimately converted into sugar, the diabetic patients should not be allowed to eat any great quantity of meat during a short period.

Constant supervision is essential. No two cases of diabetes are exactly alike, and thus there can be no fast rules applying to all in regard to supervision. Regular urine and blood examinations for sugar content apply to all cases, however.

Where insulin is used, which is very frequently, the initial dose should be small, after the patient has been on a test diet and under observation for several days. An occasional reaction to insulin, together with the usual apprehension of the patient to hypodermic medication, make the small initial dose advisable in the uncomplicated case.

Although many oral preparations are on the market, none has been found to act directly in the utilization of sugar in diabetes.

## CORONARY OCCLUSION\*

RUSSELL A. FLACK, M. D.  
LAFAYETTE

When we classify diseases of the heart, disease of the coronary arteries must be accorded an important position, and when we study the causes of death in heart disease, it must be realized that coronary occlusion is accounting for more and more cardiac deaths each year.

For many years coronary occlusion was recognized only as a pathological entity, and only in the last two decades has it received very extensive recognition as a clinical entity. The study of mortality statistics would suggest that this condition is rapidly increasing in incidence, but this impression is due, in part, to the increase in accuracy of diagnosis. There may be a true increase in the incidence of coronary occlusion as a result of an increase in the number of cases of generalized arteriosclerosis.

Coronary occlusion occurs chiefly in males between the ages of forty and seventy years. It is much less common in women, and rarely occurs before the age of forty years in either sex. The patients usually manifest evidences of general arterial disease with which hypertension is frequently associated. A history of anginal seizures is frequently elicited in these cases. Rheumatic heart disease and luetic heart disease have not been observed to predispose to coronary occlusion. Occupation and personal habits seem to have no definite bearing on the condition, and coronary occlusion is a frequent occurrence in men in all walks of life.

Coronary occlusion is almost always the result of coronary thrombosis. Coronary embolism does occur, but the number of proven cases reported is comparatively small. Thrombosis occurs as a result of disease of the coronary arterial system, which in turn is usually a part of a generalized arteriosclerosis. Thrombosis may involve any point in the coronary arterial system, but lesions are most frequently found in the descending branch of the left coronary artery. Inasmuch as anastomosis between the coronary vessels is very limited, thrombosis of even a small branch usually results in ischemia of an area of the cardiac muscle. The ischemic area very soon undergoes necrosis, becomes soft, and may rupture. If the patient survives the attack, the tissue involved is replaced by fibrous tissue, which develops into a firm scar in two to three months' time. Autopsy records contain numerous instances in which fibrotic scars were found in the myocardium in subjects that had made apparent recovery following symptoms of coronary throm-

\* Presented before the annual session of the Indiana State Medical Association at French Lick, September, 1933.

bosis several years before. With thrombosis of a coronary vessel, the resultant ischemia involves the endocardium and pericardium as well as the myocardium. A clot may form over the affected endocardial surface—the detachment of a portion of which may give rise to embolic phenomena elsewhere in the body. With involvement of the pericardium, a localized pericarditis occurs. When the area is situated on the anterior aspect of the heart, a pericardial friction rub may be audible.

Cases of coronary occlusion may be divided into three general groups: first, cases in which the occlusion has been so sudden and extensive that death occurs at once; second, cases which are severe, in which death is delayed for several hours, days, or months, or in which apparent recovery occurs; and third, cases in which occlusion occurs so slowly by arteriosclerotic diminution of the vessel caliber with eventual thrombosis that no symptoms develop. The cases falling in the second group are the ones considered in this discussion.

The following case synopses illustrate the type of clinical picture which may be encountered in coronary occlusion.

#### CASE REPORTS

*Case I.* Some time ago, a creamery operator, aged forty-four years, was seized with severe, gripping pain beneath the middle and lower sternum while driving his car soon after eating his midday meal. Within a few minutes the pain had become intense and had extended to both sides of the neck and down both arms. He was forced to ask his wife to drive for him. He became pale, perspired profusely, became very weak and was nauseated. A physician attended him and gave him temporary relief with one-half grain of morphine.

The patient was admitted to the hospital early that evening, at which time the pain was beginning to return and morphine was given to afford relief. The heart rate was eighty per minute and several extrasystoles were present. The heart-tones were of very poor volume. The temperature was 100. The blood pressure was 145 systolic and 90 diastolic. The patient had never had pain of this type before. One week previously he had run until he was very much fatigued, but he had had no pain. During the past month he had had two attacks of upper abdominal pain late at night with vomiting.

Following his admission to the hospital he was given morphine several times during the first twenty-four hours for rather severe pain, and during the following two weeks codeine was frequently given for mild pain in the upper chest. The temperature showed a maximum of 102 on the fourth day and finally returned to normal on the eleventh day. The leucocyte count was 11,000 on the second day, 13,700 on the third day, and 7,400 on the fourteenth day. An electrocardiogram was taken during the third week and evidences of coronary occlusion were noted. The patient remained at rest in

the hospital for three weeks, rested at home for several weeks, and then gradually resumed his work; he has been doing light work ever since. The attack occurred in March, 1927, and there have been no subsequent attacks of pain.

*Case II.* In March, 1933, a merchant, aged fifty-seven years, entered the hospital complaining of urinary frequency and attacks of severe pain in the region of the bladder. His urinary symptoms dated back two years. For two or three years he had had dyspnea on walking fast and on climbing stairs. With exertion he had frequently had sharp pain over the heart which had been relieved by resting for a minute or two. No attacks of pain over the heart had occurred when at rest.

On examination his blood pressure was found to be 168 systolic and 90 diastolic. The heart rate was 80 per minute and the rhythm was normal. There was slight enlargement of the heart to the left and a systolic murmur was heard over all valve areas. The radial arteries were thickened and tortuous. The urologist made a diagnosis of benign tumor of the prostate.

Under bladder irrigations, the bladder pain soon subsided. On the seventh hospital day, at noon, the patient complained of rather severe pain to the left of the lower sternum. One-quarter grain of morphine was given after which the pain subsided and was not complained of again until early evening. The morphine was then repeated and the patient rested until 2:30 the next morning. At that time there was sudden onset of intense pain over the left anterior chest with marked dyspnea. During the next eight hours, morphine was given three times to give partial relief from the pain. The dyspnea continued intermittently and there was some coughing. The patient vomited once. Between 11:30 and 1:30 morphine was given on three occasions, but the pain became more severe. The patient developed signs of profound shock, the pulse became imperceptible, the extremities became cold, and signs of pulmonary edema developed. The patient died fifteen hours after the onset of the attack.

*Case III.* In March, 1933, a retired truck farmer, aged seventy-one years, was admitted to the hospital complaining of moderate pain over the precordium and in the epigastrium, and of general weakness. For two years he had noticed some dyspnea on exertion, but had felt well until two days prior to admission when he had had very severe pain over the precordium and in epigastrium. He had been walking about his home when the pain started, and on sitting down for twenty minutes the pain was lessened, but did not disappear. At this time the patient perspired profusely and felt very weak. He continued to have moderate to severe pain up until admission to the hospital, when he was observed by a physician for the first time. He had had a poor appetite and intermittent nausea. On examination the heart-tones were poor in qual-



ity, the heart rate was 130, and was irregular due to auricular fibrillation. The blood pressure was 150 systolic and 90 diastolic. A few moist rales were heard at the lung bases. The temperature was 100 and the leucocyte count was 12,100. An electrocardiogram taken on the first hospital day showed evidence of coronary occlusion. The patient was placed at absolute bed rest and no morphine was required to relieve the pain which was satisfactorily controlled by regular doses of aspirin compound. No pain occurred after the third day in the hospital. Digitalis gave satisfactory effect in slowing the ventricular rate, but fibrillation continued. The temperature remained normal after the first week. On the eighteenth hospital day, there developed weakness of the right side of the face and left side of the body, which was considered to be caused by a cerebral embolism. The patient could not move his left extremities for about three weeks, after which control gradually returned. After eleven weeks' rest in the hospital, the patient returned to his home where he remained in bed for another month, and during the last two months he has been up and about his home a part of each day. He still requires digitalis regularly to control the fibrillation and unquestionably he has a very low cardiac reserve. He has had no subsequent attacks of pain. Subsequent electrocardiograms have confirmed the original findings of coronary occlusion.

#### SYMPTOMS

The most common symptom of coronary occlusion is pain. It is usually the first symptom announced by the patient. It attacks the patient when he is comparatively inactive, or at rest. It is usually rather low sub-sternal, or epigastric in location, and is severe. The pain is usually described as being gripping, or burning, in character. It often becomes agonizing, if it was not so from the abrupt onset, and the patient usually realizes that this pain is different from any anginal pains which he may have previously experienced. The pain may spread over the entire chest. It often extends to the left shoulder and arm and, at times, extends through to the back, or into the right arm. The pain usually continues severe for one hour or longer, subsiding slowly in severity over a period of several hours or days. The patient may lie quietly in bed, but frequently tosses about, apparently not noting aggravation of the pain on movement. The patient usually remains clear mentally and is frequently possessed of a fear of impending death.

Dyspnea, moderate to marked in degree, soon follows the onset of the pain. The patient feels extremely weak and prostrated, the skin becomes covered with clammy perspiration, and a slight to moderate cyanosis appears. Nausea frequently is noted and vomiting may occur. Transient diarrhea is occasionally observed.

The pulse is of poor volume. The blood pressure is usually lowered and, in some cases of hyper-

tension, marked declines have been noted during the attack. The heart rate is usually accelerated. The valve tones are decreased in volume and may become very indistinct. The rhythm is frequently irregular, due to extra-systoles, paroxysmal tachycardia, or auricular fibrillation. Examination of the lungs reveals the presence of moist rales at the bases early in the attack. Pulmonary edema may occur very early in severe attacks, due to rapidly developing myocardial insufficiency.

Associated with the myocardial infarction, produced by the occlusion, we find fever and leucocytosis coming on within the first twenty-four to forty-eight hours. The fever does not usually exceed 101 degrees and may last from two days to two weeks. The leucocytosis may appear earlier than the fever and rises to as much as 12,000 or 15,000, occasionally to 20,000, and does not disappear until some days after the fever has subsided. A pericardial friction rub may be heard over the precordium at the end of the first twenty-four hours and may be present for several days.

Following coronary occlusion, an electrocardiogram usually, but not invariably, shows characteristic abnormalities. It is significant that a definite change is noted very soon after the onset of the attack. These changes have to do largely with the S-T segment and the T-wave of the electrocardiogram, and when present serve to confirm the clinical diagnosis.

An acute attack of coronary occlusion in its typical form presents no great difficulties in clinical diagnosis. However, for many years attacks of all severity, particularly those in which the pain was not extremely severe, were mistaken for "acute indigestion." Occlusion has been frequently confused with angina pectoris. The ordinary attack of angina is of relatively short duration, rarely lasting fifteen minutes, and invariably related to cardiac overwork, whether it be due to physical exertion, overeating, or emotional activity. Attacks simulating angina, but of longer duration, especially if lasting one hour or more, are almost always the result of coronary thrombosis. The pain in angina responds readily to nitrites, whereas the pain in occlusion, which is usually more severe, responds only to strong sedatives. Many cases bear remarkable resemblances to different acute abdominal conditions, especially when the pain is in the lower sternal region, or in the epigastrium. Perforated ulcer of the stomach, or duodenum, may produce severe pain, nausea, vomiting, upper abdominal rigidity, and signs of collapse. Perforations usually occur at an earlier age than do coronary occlusions and the past history often aids in the differential diagnosis. Coronary occlusion has also been mistaken for acute gall bladder disease, acute pancreatitis, and renal colic. Gall bladder disease is more frequent in women and is frequently seen at earlier ages than is coronary occlusion. The past history of symptoms of cholecystitis may be

obtained. The pain in biliary colic is more apt to be spasmodic and intermittent, whereas the pain in occlusion is constant. This point also serves to differentiate the pain of coronary occlusion from the pain due to gastric crises. The observation that moist rales develop at the lung bases early in the attack serves as a valuable diagnostic aid and is a very constant finding in all severe attacks of occlusion.

#### PROGNOSIS

The immediate prognosis of coronary occlusion is very grave. Probably one-half of the patients die at once, or within a few days' time. Those who survive the immediate attack may live for several months to several years, apparently in good or fair condition. Later, death usually results from progressive myocardial failure or recurrent coronary occlusion. White has in the last few years reported series of cases, proving that attacks of acute coronary occlusion are not infrequently followed by years of active life. He recently reported the case of a man who suffered an attack of acute coronary occlusion at the age of sixty years, who was exceedingly active and enjoyed strenuous recreation until the age of seventy-three years, and who died of apoplexy at the age of eighty years. The sex and age at which the attack occurs affect the prognosis very little. Hypertension and syphilis affect the prognosis to no appreciable extent. Poor heart sounds and congestive failure do, however, add to the gravity of the prognosis. It is significant that the prognosis is not dependent upon the severity of the attack, nor upon the duration of the attack.

Following the establishment of the diagnosis of coronary occlusion, the first step in the treatment is concerned with the relief of the pain. It is of the utmost importance that the patient obtain rest and relief from the pain and, for this purpose, morphine is the drug of choice. Morphine, hypodermically, should be given at once and repeated at frequent intervals, one grain within the first hour often being required. Morphine may have to be repeated at regular intervals for several days. Recently, oxygen has been used during the acute phase of the attack, and in some cases so treated much less morphine was necessary to control the pain. Upon relieving, or lessening, the intense pain, the patient should be kept as quiet as possible. He should be saved all possible exertion. He should not be disturbed too much by extensive examinations. The treatment of shock is a very important part of the immediate treatment. External heat should be applied. Glucose, 50 per cent solution, intravenously in 25 to 40 c.c. doses, should be given every six to twelve hours.

There is much variance of opinion in regard to the advisability of using digitalis during the acute attack. However, I believe that it should be started as soon as the signs of severe shock have begun to

abate, but it should not be pushed to the physiological limit unless progressive congestive failure seems imminent. The use of adrenalin is distinctly contra-indicated. Levine has used quinidine in large doses with life-saving results in cases developing ventricular tachycardia. Following the period during which morphine is needed to control pain, the patient should be kept quiet with such drugs as chloral, bromides, or barbiturates, in doses sufficient to lower the increased nervous tension.

Subsequent to the acute attack, prolonged bed rest is of vital importance. The physician must bear in mind that an area of the heart structure has undergone serious damage and the cardiac load must be kept at a minimum until the heart has had every opportunity to repair the damage. Neglect of the long period of rest in bed subsequent to the acute attack leaves the patient open to the disastrous possibilities of myocardial rupture at the site of infarction due to occlusion. Lewis states that the scar tissue, replacing the necrosed tissue, is firm in about eight weeks. The period of absolute rest advisable may vary from six weeks to three months. Rest must continue for several weeks after the temperature and leucocyte count have returned to normal. Much depends upon the presence, or absence, of evidences of congestive heart failure and upon the general condition of the patient. During the rest period the administration of theobromine, or other of the xanthine derivatives, seems advisable. Theobromine, grains five, combined with a small dose of one of the barbiturates, is frequently used over extended periods of time. These preparations are usually very well tolerated by the patient. Digitalis is indicated only in the presence of congestive heart failure.

Following the period of absolute rest in bed, the patient must resume activity very gradually. The activity of the patient must be guarded for six months or longer, and close observation must be maintained to see that symptoms and signs of cardiac embarrassment do not develop. Familiarity with the pathology of coronary occlusion prevents one from hoping for complete restoration of function. The patient must be told that his heart has been crippled to a certain degree and he must not indulge in activity which may draw too heavily upon his cardiac reserve. It is comparatively easy for the physician to formulate rules for the regulation of the patient's physical activity. However, it is equally important, and always much more difficult to estimate and regulate the mental and emotional activity. There must be a complete adjustment of the patient's living conditions. The diet should be regulated—more stress being laid upon quantitative restrictions than qualitative restrictions of the food intake. Rest periods after meals are advisable. The patient's habits in regard to the consumption of tea, coffee, alcohol, and tobacco must be adjusted so that no irritation results from their use.



Subsequent to an attack of coronary occlusion, the future health of the patient is heavily dependent upon his intelligence and his spirit of co-operation. Certain general principles govern the regime which the patient must follow, but in the proper adjustment of the living conditions of the patient, much must be left to the judgment of the physician in charge of the individual case.

### DISCUSSION

F. E. SAYERS, M. D., Terre Haute: Dr. Flack has said that the diagnosis of coronary occlusion in its typical form presents no great difficulties to the physician. I think that is correct, but, as we all know, there are cases which are not always typical, and it seems to me that in these cases nature is at her best in attempting to confuse the doctor as to where and what the pathology is. Consider a case of acute epigastric distress which radiates to almost any part of the body. You may have this accompanied by nausea and vomiting, pyrosis, abdominal distension, rigidity and diarrhea, or it may even approach the intestinal syndrome shown in ptomaine poisoning, accompanied by some fever, leukocytosis, and in rare instances by convulsions, and in that case the diagnosis may be a little bit difficult, at least in the early stage. It is this type of case that may find its way to the operating room and be subjected to an exploratory laparotomy in the search for abdominal pathology. Within the last week I have talked to an excellent internist who was at one time connected with the teaching staff of one of our medical schools, and in two instances he had seen glycosuria develop coincidentally with the onset of these symptoms, which, of course, would cloud the picture.

The essayist has aptly said that the electrocardiograph may or may not be of help. Recently Mann and his associates have given us some real help by the use of the portable electrocardiograph, thereby making it possible for them to study these cases immediately following the onset of the symptoms. They state that as early as six hours after the onset of the symptoms they frequently find an elevation of the Q-R interval above the base line, and within thirty to forty hours later a sharp inversion of the T-wave. Simple inversion of the T-wave or decrease in the amplitude of the Q-R-S complex is always suggestive, but it must be remembered that proven cases of coronary occlusion have gone on to death with no variation from normal in the electrocardiogram.

In regard to syphilis as possibly being a factor in this condition, there is a variance of opinion. The weight of the opinion of many men, I believe, is that it is a very small factor. However, in 1925 Benson and Hunter reported their findings in 1,750 necropsies, and in these they found 200 cases of advanced coronary occlusion, and in the 200 cases

they found 35, or 17½ per cent, with syphilitic aortitis; they found 14 ruptured hearts, and in the 14, 7, or an average of 50 per cent, had syphilitic aortitis. What this means I do not know, but I think it cannot be disregarded.

The point which should be emphasized is the absolute necessity for long rest in bed after an acute attack. No matter how rapidly, how miraculously, how wonderfully, or how quickly the patient seems to improve, we must not, cannot, heed the pleading of the patient or his family to let him get out of bed too quickly, because there is no doubt in my mind that many of the disasters are due to the permission given the patient to get up too quickly.

WALTER L. BIERRING, M. D., Des Moines, Iowa: I feel that you are to be congratulated upon this comprehensive discussion of coronary thrombosis, a presentation that would not have been possible a few decades ago. This new knowledge has been a distinct contribution to American medicine, and the work of J. B. Herrick, Smith, Pardee, Levine, and other American clinicians has added a new chapter to internal medicine. It is true that Osler in his lectures in 1910 on angina pectoris gave us a clear exposition of what we now understand as coronary artery disease, in which he differentiated angina into two distinct classes, the so-called status anginosus, which corresponds to the angina of rest in acute coronary occlusion; and the angina of effort which is now a part of the symptomatology of gradual coronary occlusion. Mackenzie no doubt understood coronary artery disease, but in his latest work (1924) there is no mention of it.

We have had established for us a clinical syndrome which is easily recognized at the bedside, requiring no special laboratory demonstrations, although the electrocardiograph has added much to our knowledge; the electrocardiograms are confirmatory of the diagnosis, and are very helpful in determining the progress as well as the prognosis of the condition.

There is no doubt that coronary occlusion is being more frequently recognized. It is distinctly a part of hypertension and arteriosclerosis. While syphilis is an etiologic agent, it is not a large factor in what we now understand as coronary artery disease. Again, rheumatism, which is so common in the production of endocarditis and valvular disease, is very uncommon in the etiology of coronary artery disease. The symptomatology of acute occlusion is distinct and varies only according to the amount of infarction that takes place and the location of the same. As stated by Dr. Flack, when it is near the pericardium a pericardial rub is heard. If it is located near the endocardium, mural thrombi develop with resulting hemiplegia and other forms of vascular disturbance. The symptomatology of the onset of coronary occlusion is sudden, is accompanied by severe anginal pain often oc-

curing while at rest, and is continuous, being very different from the periodic angina of effort. The involvement of a large amount of ventricular tissue produces a distinct shock or collapse symptoms—as cyanosis, weak or absent pulse, a cold, clammy skin, and marked reduction of blood pressure. A marked tissue reaction is manifested by leukocytosis and resulting systemic fever.

Dr. Flack has presented some interesting atypical cases with abdominal symptoms in acute coronary occlusion. This taken in connection with fever and leukocytosis, makes it easy to understand how such cases may be referred to the surgeon and even come to the operating table before they are recognized. This symptom of visceral reflex pain can be explained by the development of the diaphragm and accompanying distribution of the phrenic nerve. According to Mall the anlage of the diaphragm lies in the head region of the early embryo, together with those of the heart and liver as well as the three embryonic body cavities, the pericardium, pleurae, and peritoneum, which descend to their anatomic position during the process of development. It will be noted that the diaphragm wanders from the head region to the abdomen, passing by, as well as modifying structures and organs along the way. The phrenic nerve arises in the cervical region in close connection with the third, fourth, and fifth cervical nerve roots, and enters the anlage of the diaphragm. As this organ descends, the phrenic nerve lengthens to give it innervation, and is distributed during its downward course of the pericardium and covering tissues of the heart, the upper and lower surfaces of the diaphragm, the upper epigastrium, suspensory ligament and surface of the liver, and suprarenal capsule region. It also communicates with the diaphragmatic plexus as well as the semilunar ganglion of the solar plexus.

As left shoulder pain occurs in abdominal diseases involving the diaphragm and phrenic nerve, so also may pain arising in the heart area be referred to the epigastrium and upper abdomen. With the above in mind the diagnostic interpretation of referred pain in angina pectoris and coronary occlusion is given a more logical explanation.

Aside from the reflex pains connected with the sympathetic nerve supply, the vagal sensory reflexes is involved through stimulation of the vagus. As its center in the medulla is in near relationship to the upper cervical nerves, particularly to the nerves supplying the sternocleidomastoid and trapezius muscles, these muscles often become extremely hyperalgesic in various heart affections, but the pain may also be felt in the further distribution of the cervical nerves.

The radiation of the stimulus from the vagus of the center of the fifth nerve may cause pain to be felt in the gums and throat during an attack of angina pectoris.

There is no doubt that in the treatment outlined by Dr. Flack, the most important feature is rest, and that this rest should be absolute. Special nursing is necessary, and the patient should not feed himself for several days. Exertion incident to the use of the bedpan should be guarded most carefully, as it has happened that a patient in attempting to go to the toilet has died during the effort.

While morphine in large doses is necessary to control the pain in acute coronary occlusion, the recent reports of the use of oxygen for the relief of severe anginal pain have been very striking. Considering the cause of pain as an anoxemia, the application of oxygen therapy seems very logical.

The symptom complex of coronary occlusion is now well established, and this recognition implies that definite anatomic changes have developed in the coronary circulation and the myocardium. These have been years in forming, and it should be possible to develop a syndrome permitting their recognition. Riesman, a few years ago, proposed the name myocardosis, which is a generic term meaning disease of the myocardium. It is more expressive than the old term, chronic myocarditis.

The need of a careful history is evident and its completeness will depend on the art and ability of the examiner to draw out the essential subjective complaints. A proper estimate of the patient's reaction to effort has definite diagnostic value. Early signs of myocardial weakness are fatigability, or tiredness after the ordinary habits incident to the daily order of life.

The three steps to heart failure have been termed by Kauffman as breathlessness, palpitation and substernal distress. To these may be added certain vasomotor disturbances as vertigo, syncope and occasionally convulsions. Various physical tests as enlargement of the heart, cardio-respiratory tests, blood pressure and pulse changes with exertion are further indications of a lowered myocardial reserve.

The proper appreciation of the myocardosis syndrome offers the one hope to modify and possibly control the tendency to progressive and more serious myocardial damage, and above all, it opens up a new field in preventive medicine that is worthy of our best efforts.

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DIPHTHERIA CONTROL

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In THE JOURNAL ten years ago Harshman<sup>1</sup> reported observations which he had been making for almost three years on diphtheria control at the Indiana School for Feeble-minded Youth. In reading Schick tests he chose to use a classification of negative, positive, and suspicious. The last group in all probability belongs to the negative group, but were treated with toxin-antitoxin for public health safety in the institution. This same classification will prevail in this report for purposes of clarity and comparison.

In 1920-1923, there were studied 1,516 patients relative to immunity responses. At the first examination the following findings were made relative to the Schick susceptibility tests:

	No.	Per Cent
Negative Schicks .....	733	48.4
Positive Schicks .....	742	49.0
Suspicious Schicks .....	41	2.6
Total .....	1,516	100.0

Of the 783 positive and suspicious cases given one series of toxin-antitoxin, and examined for immunity six months later, the following findings were obtained:

	No.	Per Cent
Negative Schicks .....	721	92.2
Positive Schicks .....	55	7.0
Suspicious Schicks .....	7	.8
Total .....	783	100.0

Of the original 1,516 patients 656 are still available for study, and observations on their immune responses have been compiled in 1933. These individuals group themselves into four classes which are tabulated below.

Of 256 patients showing a negative Schick without vaccination in 1920, the findings in 1933 are:

	No.	Per Cent
Negative Schicks .....	203	79.6
Positive Schicks .....	37	14.2
Suspicious Schicks .....	16	6.2
Total .....	256	100.0

Of 360 patients showing a positive or suspicious Schick in 1920 and a negative Schick after a single series of injections of toxin-antitoxin in 1921, the findings in 1933 are:

	No.	Per Cent
Negative Schicks .....	240	66.7
Positive Schicks .....	90	25.0
Suspicious Schicks .....	30	8.3
Total .....	360	100.0

Of 32 patients showing a positive or suspicious Schick after the first series of toxin-antitoxin mixtures, but negative Schicks after the second series of toxin-antitoxin injections in 1920-1922, the findings in 1933 are:

	No.	Per Cent
Negative Schicks .....	21	65.9
Positive Schicks .....	11	34.1
Suspicious Schicks .....	..	....
Total .....	32	100.0

Of 9 patients showing a positive or suspicious Schick after receiving two series of toxin-antitoxin mixtures, but negative Schick after a third series of injections in 1920-1923, the findings in 1933 are:

	No.	Per Cent
Negative Schicks .....	4	45.0
Positive Schicks .....	4	45.0
Suspicious Schicks .....	1	10.0
Total .....	9	100.0

Recapitulation of the total findings of these 656 patients who had negative Schicks by 1923 shows in 1933:

	No.	Per Cent
Negative Schicks .....	468	71.3
Positive Schicks .....	141	21.5
Suspicious Schicks .....	47	7.2
Total .....	656	100.0

In his closing remarks, Harshman<sup>1</sup> stated that "only time will tell as to the permanency of this immunity." This group of cases is unusual in that it is difficult ever to find so large a number living for such a long period of time in an environment practically constant. An interesting point in these cases, but not yet studied, would be the probable antitoxin titre of the serum of the patients showing positive or suspicious tests.

From the practical standpoint none of these cases in the entire group of 1,516 have had diphtheria as long as they remained in the institution. As a matter of fact, only five cases of diphtheria have been found in the entire school population since 1921. Four of these cases occurred in patients recently admitted and not yet immunized. One case occurred in a patient on whom a Schick test had not been made six months after receiving his first series of injections of toxoid which we use now.

We believe emphasis should be made concerning the importance of the application and reapplication of the Schick test to individuals who have been vaccinated.

<sup>1</sup> Harshman, L. P.: Diphtheria Control, *Jr. Ind. St. Med. Assoc.*, XVI:389-392.

## PREOPERATIVE AND POSTOPERATIVE TREATMENT OF EXOPHTHALMIC GOITER AND OF HYPERFUNCTIONING ADENOMATOUS GOITER\*

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To have clearly in mind the principles involved in the preoperative and postoperative treatment of exophthalmic goiter and of hyperfunctioning adenomatous goiter, it seems essential briefly to review the altered physiologic processes and certain of the clinical manifestations occurring in these diseases.

H. S. Plummer has advanced the hypothesis that the physiologic complex associated with hyperfunctioning adenomatous goiter results from an excessive amount of thyroxin, the normal active thyroid agent, in the tissues of the body. Once hyperthyroidism has been initiated, the course of the disease usually is progressive. Within three weeks following resection of the adenomatous tissue, however, the symptoms and clinical signs of hyperthyroidism disappear, and the basal metabolic rate returns to a normal level.

Likewise, H. S. Plummer has advanced the hypothesis that the physiologic complex associated with exophthalmic goiter results from not only the presence of an excessive amount of thyroxin in the tissues of the body, but also an abnormal product of the thyroid gland, the nature of which is unknown. This abnormal agent is believed to be responsible for the production of the phenomena considered to be characteristic of exophthalmic goiter; namely, certain peculiar nervous manifestations, ocular signs, and a tendency to crisis.

Crisis, the most serious status of exophthalmic goiter, is believed to occur during a period of severe intoxication from the abnormal product of the thyroid gland. Dehydration, extreme prostration, and marked loss of weight are frequent occurrences during this phase of the disease. During crisis, infectious processes are especially prone to develop. Uncontrolled crisis may eventuate in death.

Theoretically, the clinical manifestations of exophthalmic goiter should vary during different phases of the disease, according to the total and relative amounts of the normal and abnormal products of the thyroid gland delivered to the tissues of the body. H. S. Plummer doubts that the thyroid gland will elaborate much, if any, abnormal agent in the presence of an adequate supply of iodine.

### PREOPERATIVE TREATMENT

*Hyperfunctioning adenomatous goiter.*—Uncomplicated hyperfunctioning adenomatous goiter constitutes a purely surgical problem. Other than the benefit to be derived from rest in hospital for a few days, there is little need for preoperative care in the uncomplicated cases. Inasmuch as treatment of complicated cases of hyperfunctioning adenomatous goiter and of exophthalmic goiter is similar, consideration of treatment of the complicated case of exophthalmic goiter will suffice. After the associated complicating conditions in cases of hyperfunctioning adenomatous goiter have been satisfactorily controlled, there is no contra-indication to proceeding with operation on the thyroid gland.

Inasmuch as approximately one-third of the instances of exophthalmic goiter occur in cases in which the patient's thyroid gland already contains adenomatous tissue, it is obvious that iodine should be administered preoperatively in those cases of nodular goiter in which an associated exophthalmic goiter can not be excluded.

*Exophthalmic goiter.*—Exophthalmic goiter, also, still is essentially a surgical problem. Treatment other than surgery is directed largely to preparation of the patient so that he can be operated on with the least possible risk. The treatment may be divided into two types: nonspecific and specific, or treatment with iodine. The time and effort expended in preoperative care in cases of exophthalmic goiter is determined by the severity and duration of the disease, the rapidity with which improvement occurs, and whether or not complications exist. Iodine supplied to the patient in adequate amount theoretically should abolish the phenomena which result from the presence of an abnormal agent derived from the thyroid gland. Iodine will not abolish the features of the disease resulting from the presence of excessive secretion of the normal agent of the thyroid gland, however.

H. S. Plummer's demonstration, in 1922, of the value of administration of iodine in the preoperative and postoperative course of exophthalmic goiter has entirely revolutionized the methods of procedure in treatment of the disease. In adequate dosage, administration of iodine has practically abolished deaths from the disease while patients are receiving nonoperative care, it has controlled crisis, and it has greatly reduced postoperative reactions which formerly were responsible for at least 50 per cent of the deaths following operation for exophthalmic goiter. Also, the period of preoperative care has been reduced, postoperative convalescence is smoother, and minor preliminary surgical procedures, such as injection of hot water and ligation, seldom are necessary. In the majority of cases, primary thyroidectomy is performed with comparative safety. The mortality rate following operation has been greatly reduced. Prior to introduction of compound solution of iodine in the preoperative treatment of exophthalmic goiter, H. S. Plummer reported a mortality rate of 3.5 per cent over a

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period of ten years in cases in which operation was performed at the Mayo Clinic. In recent years, the mortality rate has been consistently below 1 per cent. At the present time, the mortality occurs largely in the group of cases in which the disease has existed for a protracted time, usually eighteen months or longer, and in which extensive visceral degenerative changes have taken place.

In the preoperative care of the patient who has exophthalmic goiter, it is essential that iodine be administered in adequate dosage, and over a sufficiently long period of time, to secure the maximal degree of clinical improvement. Thirty minims of compound solution of iodine daily usually suffice to control the manifestations resulting from an abnormal product of the thyroid gland. Improvement in the patient's condition usually is evident by the second or third day, and maximal improvement usually results within a period of from seven to ten days after institution of treatment by iodine. Improvement in severe and protracted cases of exophthalmic goiter, and in cases in which there has been recent crisis, may continue over a period of from three to four weeks. Patients who are in a state of crisis should receive from 50 to 100 minims of compound solution of iodine within one to two hours after admission, and thereafter a like amount daily until crisis has been controlled. Definite improvement often is noted within a few hours, and crisis may be controlled entirely within a period of from twelve to twenty-four hours. In cases in which compound solution of iodine is not retained when administered to the patient by mouth, it can be administered in physiologic solution of sodium chloride by rectum. Compound solution of iodine has been administered satisfactorily by duodenal or nasal tube to unconscious patients. Occasionally, sodium iodide has been given intravenously. Discontinuance of treatment by iodine usually results in recurrence of symptoms of exophthalmic goiter within three to four days, and may eventuate in crisis within two or three weeks. Resumption of the use of iodine will again control these manifestations.

Nonspecific measures in preoperative care for exophthalmic goiter largely consist of rest and an adequate supply of fluids and nourishment. Unless the patient is in a state of crisis, or is suffering from decompensation of the heart, rest in bed is not advised, for patients strictly confined to bed lose strength, and are more prone to have postoperative pulmonary complications than those who are allowed to be up and about part of the day. In the clinic we prefer to have the patient up from four to six hours daily for at least several days prior to operation, during preparation for operation for exophthalmic goiter. Not infrequently the caloric requirement of the patient suffering from severe exophthalmic goiter is from 3,000 to 5,000 calories daily. Unless sufficient nourishment to meet this requirement is supplied, oxidation of the tissues of

the body will result, with consequent loss of weight and strength. It is imperative that patients who give evidence of a marked degree of prostration and dehydration, and patients who are in crisis have an adequate supply of fluids and nourishment. During a severe phase of the disease, this may be supplied readily by administering 10 per cent solution of glucose, or physiologic solution of sodium chloride, in quantities of 1 liter by vein or rectum several times daily. Sedatives, such as pentobarbital-sodium (nembutal), isoamylethyl barbituric acid (amytal) and phenobarbital (luminal) are valuable aids in quieting a restless patient, promoting sleep, and conserving strength during an acute phase of the disease.

*In complicated cases.*—Myocardial degeneration associated with auricular fibrillation, auricular flutter, or congestive cardiac failure may occur in the course of either exophthalmic goiter or hyperfunctioning adenomatous goiter. In this event, however, usually organic cardiac disease has existed previous to the development of the disease of the thyroid gland. It is doubtful that surgical risk is increased appreciably by occurrence of either auricular fibrillation or auricular flutter, and usually the presence of these cardiac manifestations can be disregarded in considering the case from the standpoint of operation. Patients who have congestive heart failure are confined to bed until they are free of edema. Thereafter, gradually, they are allowed to be up and about previous to operation. Administration of digitalis in these instances seldom is necessary or advisable. H. S. Plummer showed that there was definite lessening of the operative mortality rate in cases of exophthalmic goiter and hyperfunctioning adenomatous goiter with associated congestive heart failure following discontinuance of the use of digitalis in preoperative treatment. In cases of exophthalmic goiter complicated by congestive heart failure, rest in bed and adequate administration of compound solution of iodine usually bring about restoration of compensation as satisfactory as that which occurs in a similar degree of congestive failure in cases of primary disease of the heart subsequent to rest in bed and administration of digitalis. In the occasional case of exophthalmic goiter or hyperfunctioning adenomatous goiter in which compensation is not restored by these methods, and in which it becomes necessary to administer digitalis to restore compensation, it is advisable to discontinue administration of digitalis for at least four to six days before operation, after compensation has been restored. In severe degrees of congestive failure, with anasarca and accumulation of fluid in the serous cavities, the mercurial diuretics prove of great value in freeing the patient of edema. In the clinic we prefer to use salyrgan, usually giving the patient from 1 to 2 c.c. intravenously every three or four days. As a supplementary measure, administration of 6 gm. of ammonium nitrate daily increases the diuresis.

Coincidentally, with either exophthalmic goiter or hyperfunctioning adenomatous goiter, other diseases may occur, and the symptoms of the latter may be aggravated by hyperthyroidism, or may mask the hyperthyroid state and render the diagnosis and treatment of both diseases more difficult. The incidence of glycosuria is rather high in cases of hyperthyroidism. The glycosuria may be of a physiologic nature, or it may indicate a flare-up of latent or mild diabetes mellitus. Therefore, the possibility of coexisting hyperthyroidism in cases of diabetes mellitus in which the patients fail properly to respond to treatment always should be suspected. Wilder repeatedly has called attention to the fact that severe exophthalmic goiter with crisis readily will provoke coma in a case of diabetes, and has advocated prophylactic administration of compound solution of iodine in all cases of diabetic coma in which there has been a previous diagnosis of exophthalmic goiter, or in which coexisting exophthalmic goiter is suspected. Administration of compound solution of iodine does not influence the course of diabetes mellitus that is associated with hyperfunctioning adenomatous goiter. In both hyperfunctioning adenomatous goiter and exophthalmic goiter, however, the severity of the diabetes mellitus is lessened following subtotal thyroidectomy and control of the hyperthyroidism.

Abdominal manifestations may occur in a severe phase of the course of exophthalmic goiter, and occasionally in the course of hyperfunctioning adenomatous goiter, either as a result of crisis of the exophthalmic goiter or as a result of aggravation of latent intra-abdominal disease by the hyperthyroidism. In either instance, abdominal operation is most emphatically contra-indicated. Leukocytosis and fever indicate associated infection. Treatment consists in complete rest in bed, supportive measures, and liberal use of sedatives to promote rest, and, in cases of exophthalmic goiter, administration of liberal quantities of compound solution of iodine. The existence of hyperthyroidism definitely augments surgical risk, even the risk associated with a minor surgical procedure such as tonsillectomy or alveolectomy, and therefore operation on the thyroid gland should have primary consideration in all cases.

#### INDICATIONS AND CONTRA-INDICATIONS FOR OPERATION

In cases of exophthalmic goiter the patient is considered to constitute a satisfactory surgical risk for thyroidectomy when the manifestations resulting from the presence of the abnormal product have been controlled by iodine, and after sufficient gain in weight and in strength have been attained, regardless of whether or not the basal metabolic rate has dropped appreciably. Cases of exophthalmic goiter in which the following requirements have been met and features noted, in the pre-

operative period constitute ideal surgical risks: (1) compound solution of iodine 30 minims daily, for from seven to ten days previous to operation, (2) no fever for at least seven days previous to operation, (3) patient up and about four to six hours daily, without ill effect, for at least several days previous to operation, (4) abnormally stimulated condition abolished, (5) heart in compensation, (6) gain in weight and strength, (7) ability to sleep well, (8) appetite good, (9) pulse rate falling, and (10) basal metabolic rate lowered.

Unfavorable factors, which increase the surgical risk in cases of exophthalmic goiter are: (1) long duration of the disease, (2) severe degree of intoxication, (3) recent crisis, (4) youth or advanced age, (5) very large thyroid gland, (6) extreme prostration and loss of weight, and (7) coexisting diseases.

#### POSTOPERATIVE TREATMENT

Postoperative complications develop most often in cases of exophthalmic goiter and hyperfunctioning adenomatous goiter which are severe and protracted. Pulmonary infection is the most frequent in occurrence. Unusually high or prolonged elevation of pulse rate and temperature should arouse suspicion relative to the possibility of a complicating infection. Anoxemia, manifested early in its occurrence by slight cyanosis of the lips and nails, indicates interference with respiration. This may be caused by pulmonary edema, excessive accumulation of mucus in the respiratory tract, bronchopneumonia, or injury to the vocal cords. Early treatment frequently prevents the condition progressing to a serious degree. Administration of oxygen, either by tent or in a chamber, frequently will produce a crisis-like drop in pulse rate and temperature, and a marked degree of clinical improvement.

Following operation for exophthalmic goiter, administration of compound solution of iodine usually is continued in doses of 10 minims daily for eight weeks. In cases of recurrent exophthalmic goiter in which the symptoms have been controlled and the basal metabolic rate returns to normal following administration of compound solution of iodine, there is ultimate cure in a high percentage of cases. Further resection of the thyroid gland is indicated, however, in cases of recurrent exophthalmic goiter in which compound solution of iodine fails to control the disease.

#### COMMENT

Early recognition of exophthalmic goiter and of hyperfunctioning adenomatous goiter, opportune and adequate preoperative care, and thyroidectomy early in the course of the disease reduce the surgical risk and contribute to the most satisfactory results following operation.



## ARTHRITIS OF THE SPINE WITH REFERENCE TO NERVE ROOT SYMPTOMS\*

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Investigation in recent years has established the fact that radiculitis usually, if not always, results from secondary involvement of the nerve roots. Symptoms directly referable to the primary disease are usually minimal and frequently absent. In contrast, the magnitude of the nerve root symptoms and the remoteness of their distribution usually give rise to such illusive and bizarre clinical pictures that a failure to recognize the underlying pathologic process may readily occur. Consequently, symptoms of pain and of hyper- or hypoaesthesia radiating along the distribution of the sciatic nerve, or of a segmental nerve such as one of the intercostals, or into the arms, have been classified not infrequently, as clinical entities, as idiopathic sciatica, intercostal neuralgia, neuritis and neuralgia of the arms respectively. Not infrequently the pain may simulate that arising from visceral disease such as angina pectoris and gastrointestinal disorders or give rise to a diagnosis of hysteria.

By far the most common cause of these nerve root symptoms is arthritis of the spine and it is with this group that this presentation will deal. We therefore exclude, before progressing further, the radicular symptoms arising from disease of the central nervous system such as *tuberculosis dorsalis*, from chemical poisons such as alcoholism, from extrinsic and intrinsic neoplasms such as vertebral metastases of carcinoma, cancer of the pelvis and neurogenic tumors, from metabolic diseases such as osteomalacia and pellagra, vertebral abnormalities such as spondylolisthesis, etc.

Arthritis of the spine may be a part of a generalized process including one or more joints of the extremities or the process may be limited to the vertebral column. Likewise, the vertebral involvement may be restricted to certain segments most frequently the lumbar or cervical spine and not infrequently only to two or three vertebrae.

Certain observations have definitely demonstrated that the majority of persons past middle life have changes in the vertebrae characteristic of arthritis of the spine. Garvin<sup>1</sup> made the incidental observation of roentgenographic evidence of arthritis of the spine in 58% of roentgenograms of the genitourinary tract of 2090 patients over 50 years of age. With few exceptions these examinations had no reference to spinal disease and an analysis of 500 cases selected at random indicated that approximately 70% of cases with hypertrophic or degenerative arthritis of the spine had no accompanying complaints of rheumatism or neuromus-

cular pain. Schmorl<sup>2</sup> has made similar observations from a large series of spines examined post-mortem. Many observers have commented upon the slowness or absence of symptoms in the presence of extensive pathologic changes.

Although practically all types of arthritis may involve the spine, radiculitis occurs principally in association with degenerative or osteoarthritis and to a less extent with proliferative or rheumatoid arthritis. In both types the inflammatory, proliferative and destructive changes which occur in the intervertebral discs adjacent surfaces of the vertebral bodies, the articular facets, and the adjacent ligamentous tissues cause inflammation or irritation of, or pressure upon, the nerve roots in the intravertebral foramina. In the dorsal region the costovertebral articulations may be involved and if ankylosis occurs respiration may be somewhat embarrassed. Recently, Kountz and Alexander<sup>3</sup> have contributed considerable evidence which indicates that the underlying causes of non-obstructive pulmonary emphysema are the degenerative changes which take place in the intervertebral discs of the thoracic spine. Widening of these discs extends the dorsal spine and increases the volume of the thoracic cage. The pulmonary alveolar distention is therefore compensatory and a secondary manifestation.

With the exception of a type of arthritis occurring in young persons and of gonorrheal origin, the etiology of both degenerative and proliferative arthritis has never been definitely established. Much evidence, however, suggests that the proliferative type probably has an infectious or toxic etiology whereas the degenerative group represents degenerative changes of senility and the natural consequences of constant functional trauma. In this regard Compere and Keyes<sup>4</sup> of the University of Chicago have recently advanced an interesting theory in a publication of their investigation of the nucleus pulposus of the intervertebral disc. They have demonstrated the frequent occurrence of rupture of the cartilage plate with extravasation of the gelatinous material of the nucleus pulposus into an adjacent vertebral body. The collapse of the intervertebral disc and its subsequent disintegration permits the bony surfaces of the adjacent vertebral bodies to contact each other. Proliferation then takes place and the pathologic picture of degenerative or osteoarthritis results. In their opinion, trauma is the most likely cause of these ruptures. However, that these ruptures might occur as a result of degenerative changes of osteoarthritis and represent the sequelae rather than a cause of the arthritic changes seem equally probable.

In June, 1932, I reported<sup>5</sup> an analysis of 60 cases of arthritis of the cervical spine. This study demonstrated that the motor and sympathetic as well as the sensory components of the nerve roots are not infrequently involved and may reflect evidence both of interference in conduction and of stimulation.

\* From the Department of Surgery, University of Michigan. Read before the Elkhart County Medical Society, Elkhart, Ind., March 5, 1933.

Thirty-one patients complained of headaches either alone or associated with other symptoms. They were occipital or suboccipital in location with, in some cases, radiation into the neck or up over the head. In many cases they became worse in damp or cold weather and were aggravated by bending or twisting of the head and by the jarring of walking, coughing or sneezing. Frequently relief was obtained by supporting the head with the hands, by lying down, or by the application of heat.

Pain, tenderness, stiffness, ankylosis and crepitation, localized to the neck, were observed in 38 cases as local manifestations alone or in conjunction with remote root symptoms. Tenderness over the spinous processes, drawing sensations, and a sense of fatigue in the neck and shoulders were common complaints. Eight patients complained of "neuritis" in the shoulders and arms. The pain was usually described as quite severe, often dull and usually paroxysmal, but occasionally constant. In five cases it was unilateral; in three bilateral. Its extension varied from the shoulder to the tips of the fingers. Frequently there was an associated sense of weakness and awkwardness in motion of the fingers and arms and, in most cases, numbness and paresthesia. The topography of these sensations and the areas of diminished sensations were usually diffuse and in only two instances sufficiently well defined to correspond to nerve root or trunk distribution. Two cases presented objective evidence of sensory nerve involvement capable of nerve root localization. The patients stated that their arms or hands felt as though they were asleep, or they complained of tingling, burning, crawling, and stinging sensations.

Of the 60 cases, there were four with definite evidence of motor nerve involvement and a large group in which some disturbance could be assumed. Associated with the sensory symptoms in the majority of cases, there was a complaint of weakness or difficulty in coordination of certain muscle groups or of the entire extremity. Definite atrophy, generalized or localized to certain muscles, was noted in several cases, but obviously this is difficult to differentiate from the atrophy of disuse resulting from the pain. Wasting of the thenar and hypothenar eminences was observed in several cases.

The motor symptoms may reflect evidence of irritation and stimulation of the root fibers, such as twitches and continuous or spasmodic contractions.

Radiculitis likewise may reflect involvement of the cervical sympathetic nerve fibers. Wagenhals<sup>1</sup> reported a case with Horner's syndrome on one side.

This outline of the signs and symptoms of arthritis of the cervical spine and of the associated root symptoms is applicable in a general way to the thoracic and lumbar segments. Localized to these spinal segments there may be pain, tenderness, stiffness, ankylosis, crepitation on motion, and

spasm of the erector spinae muscles. Poker backs, the round stiff backs of arthritis deformans, mild scolioses, and a list of the pelvis to one side are frequent observations. Low back pain is a frequent manifestation.

Along the distribution of the segmental nerves there may be pain, numbness and paresthesia, the pain simulating angina pectoris, the girdle pain of tabes, and pain arising from disease of the gastrointestinal or genito-urinary organs.

In the lumbar region the most common and most important radicular manifestation is pain radiating along the distribution of the sciatic nerve which is usually designated as sciatica or sciatic neuritis. The frequency of sciatic symptoms has been attributed to the large size of the fourth and fifth lumbar nerve roots in respect to their intervertebral foramina. Similarly the other sensory symptoms such as numbness and paresthesia and such evidence of motor nerve involvement as weakness and atrophy of all or a part of the muscles supplied by the sciatic nerve frequently occur. Often there is tenderness to pressure over the nerve.

Signs of inflammation of the lumbosacral and sacroiliac joints may be present and may be demonstrated by eliciting local tenderness and pain from the strain incident to the motion of these joints produced by back bending and straight leg raising.

Frequently a marked narrowing of the cartilage space between the fifth lumbar segment and the sacrum can be demonstrated by lateral roentgenograms. In a recent publication, William<sup>2</sup> attributed this narrowing and the subsequent arthritic changes and nerve root symptoms to rupture of the nucleus pulposus and conjectures that trauma is the most likely cause of these ruptures.

The diagnosis of arthritis of the spine can usually be made without difficulty from the history, physical signs and roentgenographic studies. The difficulty lies in the fact that the arthritis is so often locally silent and manifests itself only by remote nerve root symptoms that it passes unsuspected. However, for this same reason and for the reason that some evidence or arthritic changes can be demonstrated in such a high percentage of people past middle life it is equally dangerous to attribute nerve root symptoms to vertebral arthritis until all other causes of such symptoms have been excluded by a very careful and thorough examination.

The past decade has brought forth a multitude of vaccines and medicinal, physiotherapeutic and anaphylactic agents for use in the treatment of arthritis, none of which have had specific value. The occasional spectacular cure following the elimination of foci of infection justifies eradication of definitely infected foci, especially in the proliferative group.

Local rest is undoubtedly the most beneficial therapeutic measure for most cases. During the acute, severe phases of the disease, the elimination of weight bearing or recumbency upon a Bradford frame with the spine slightly hyperextended may



be necessary. In ambulatory cases, much symptomatic relief from strain, rest from limitation of motion, and prevention of a kyphos deformity can be obtained from strapping with adhesive tape, from Taylor or similar back braces, from lumbosacral and sacroiliac belts and from reinforced corsets.

When the pathologic changes progress to the point of ankylosis relief from symptoms is often spontaneously effected. This fact suggested internal splinting and immobilization by fusion operations which have been carried out principally in the lumbosacral region.

The treatment of symptoms of radiculitis of arthritic origin consists primarily in the treatment of the arthritis, the causative agent. Roentgen irradiation of the spine has brought about in several instances considerable relief from pain. It has been postulated that the action of the rays upon the fibrous tissue decompresses the nerve roots.

Some of the many methods which have been used in the treatment of sciatic pain are, (1) injection of the sciatic nerve with salt solution or alcohol; (2) exposure and dissection of the sciatic nerve from its bed in the thigh; (3) stretching of the hamstring tendons by forceful flexion of the thigh upon the abdomen; (4) weighted traction upon the affected leg; (5) immobilization of the spine and lower extremities in either a single or double hip spica; (6) an extradural injection of the sacral canal with novocain or salt solution; (7) arthrodesis of the lumbosacral or one or both sacroiliac joints or of all three joints. The considerable risk associated with this operation and its frequent failures to bring about a satisfactory relief of symptoms, limits its use to the severe protracted cases which fail to respond to the more conservative methods, the most effective of which is the absolute rest of four to six weeks gained by immobilization in a plaster spica.

Intraspinal section of segmental sensory nerve roots and chordotomy are two procedures which have been recommended but are too radical for use in other than very exceptional cases. I have seen one very gratifying result from the latter type of operation.

Special indications arise which demand special forms of treatment such as splinting and supporting apparatus to prevent overstretching of partially paralyzed and atrophic muscles and to prevent the development of contracture deformities of the extremities. The round backs or kyphos deformities, can be corrected in the early stage of development (before they become fixed) by recumbency for a short period upon a hyperextension frame and these deformities can be prevented by continued use of a well fitted long back brace.

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## ZINC STEARATE POISONING IN INFANCY

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The occurrence of a case of zinc stearate poisoning in a four and one-half weeks old infant, with almost fatal termination, again brings to our minds the dangers of its use. It is the purpose of this paper to review this subject and in this manner call to the attention of the medical profession a forgotten warning.

#### PHARMACOLOGY OF ZINC STEARATE<sup>1</sup>

"Zinc stearate is a compound of zinc with stearic acid and variable proportions of palmitic acid corresponding to not less than 13 per cent, and not more than 15.5 per cent, of zinc oxide."

Zinc stearate may be made by mixing a solution of sodium stearate with one of zinc acetate, at a

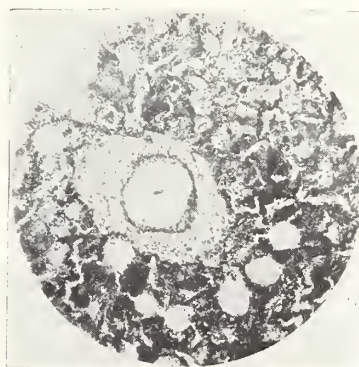


Fig. 1. Hemorrhagic Area. Perivascular edema.

temperature of 50° C., washing, and then drying the precipitate.

*Uses.*—Zinc stearate is employed in eczema, acne and other cutaneous diseases, in the form of powder, or made into a substitute for talcum powder.

During the past years zinc stearate has largely replaced talcum as a dusting powder in the nursery. With its ever widening use there has developed a number of disastrous results from its accidental aspiration.

*History.*—The first reported case was that of Bass<sup>2</sup> in 1919. Fisher and Barnett each reported

a case in 1920-1921. The first complete study of this subject with animal experimentation was reported by Heiman and Aschner.<sup>3</sup> They reported twelve cases with one autopsy. Since this report many others have been in the literature.<sup>4,5,6</sup>

In 1923 a committee was appointed by the Board of Trustees of the American Medical Association to study this problem and to bring in a report<sup>7,8</sup> with recommendations. The following is a summary of the work of the two reports submitted:

#### SUMMARY

##### *First Report June, 1924*

1. No evidence that zinc stearate has any advantages over other well known powders—as talc, etc.
2. To be sold in containers with permanently attached covers.
3. Cover should be made to make it impossible for an infant to place it in the mouth.
4. Valve on lid of containers.
5. Labels warning to keep container out of infant's reach.

##### *Second Report March, 1925*

1. Committee received reports of 131 cases of poisoning, 28 of which terminated fatally (21%). Also many accidents were reported. Hazards were greater than report would indicate.

##### *Report of Conference of Manufacturers October 31, 1924*

To adopt recommendations of committee.

By H. W. Rodehamel (Secretary of group).

##### *Opinion of Therapeutic Value From Committee*

Fifty Pediatricians were asked:

1. Should the use of zinc stearate be discouraged?
2. Whether or not dusting powders made up wholly or in part of zinc stearate are necessary for baby's comfort and health?
3. Does the hazard of infant life outweigh their advantages?

33 answers:

30 were of the opinion that its use is not necessary and its use should be discouraged.

#### CONCLUSIONS

Evidence is against the value of zinc stearate as a dusting powder for infants.

#### RECOMMENDATIONS

1. Use container as directed and labeled as above.
2. Discourage use of zinc stearate.

As a result of the efforts of the American Medical Association, the state of Illinois, in 1926, passed a law providing proper containers for zinc stearate (self closing) with a caution label and provided a fine of two hundred dollars for failure to comply

with the law. Florida has contemplated a similar law.

A personal investigation of all powders containing above 25 per cent of zinc stearate showed about 66 per cent of the manufacturers complying with the suggestion of the American Medical Association and about 34 per cent continuing the use of the old-style top or valve. It is hoped that the 34 per cent group will soon adopt the self-closing and properly labeled containers.

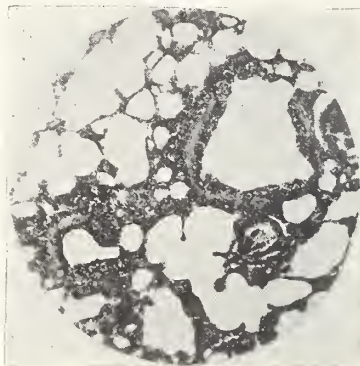


Fig. 2. Slight interstitial pneumonitis after talcum insufflation.

*Report of Case.*—A normal infant, age four and one-half weeks. After a bath and rub the baby was dusted with zinc stearate powder and placed in the crib. The mother went down stairs to get the mid-morning feeding. While out of the room the three-year-old brother picked up the nearby zinc stearate can, opened the top and poured the contents over the baby's face. The material was aspirated. The baby immediately became deeply cyanotic with a great increase in the respiratory rate. Oxygen and carbon dioxide to produce hyper-ventilation were started after an attempt to aspirate the air passages by a suction apparatus.

*Course.*—Eight hours after the accident all the signs of a bilateral broncho-pneumonia were present. The cyanosis became deeper and the breathing was that seen in obstruction. The pulse was rapid but full. Temperature the first twelve hours, 98.6. The breathing was chiefly abdominal but difficult because of the marked distension. There was supra- and infra-sternal retraction.

At the end of the first twenty-four hours the baby's condition was critical. The cyanosis continued and could only be controlled by the continuous use of oxygen. The baby showed alternating signs of irritability and coma. Tube feeding was used. Temperature at this time was 106 degrees. Enemas were given to relieve the distension.

At the end of the fourth day, after the coughing up of a large bolus of mucus (about two ounces), which was swallowed and later washed out of the stomach, the child seemed remarkably improved. The cyanosis disappeared; oxygen was given intermittently; and food could be given through a medicine dropper. From this point on the recovery was



uneventful with gradual clearing of lung signs. The infant was discharged on the tenth day with negative physical signs in the lungs and gaining weight.

*Treatment.*—1. Removal of any powder that has been aspirated is advocated if done promptly. Usually this is not possible in very young children. Oxygen inhalation, as needed. Be sure that patient gets enough. Atropine and adrenaline when stimulation is needed. Morphia where sedative is indicated. Gastric lavage for removal of mucus swallowed. There is no evidence that the zinc stearate swallowed will cause any toxic or local effect on the gastric mucosa. Gavage when necessary to supply the caloric demands, and provide rest for the patient. Efforts to nurse may be beyond the child's capacity to breathe. Above all, give the patient rest. Too often such needless procedures as temperature every hour or the taking of x-rays for diagnostic study are ordered, only to exhaust the patient through frequent disturbance. The constant attention of a physician or nurse is imperative.

#### PATHOLOGICAL STUDY

The preceding figures (1-2) are taken from the reports of Heiman and Aschner<sup>3</sup> to illustrate the pathology found after aspiration of zinc stearate. It is worthy of note that Figure 2 shows an interstitial pneumonitis after talcum insufflation.

#### PROGNOSIS

No great amount of comment is made on the prognosis in most of the cases studied. There is a certain amount of fibrosis of the lung. In the case herein reported there was no evidence of any lung pathology at the end of two months.

#### CONCLUSIONS

1. Cases of zinc stearate insufflation continue to occur. This is an acute emergency of infancy. The mortality rate is high.

2. Some manufacturers are slow to adopt suggestions made by the A. M. A. in 1924.

3. Efforts should be made by the medical profession to educate the public concerning these dangers, and to advise mothers against the use of zinc stearate powders.

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### PHOTOGRAPHS OF PAST PRESIDENTS WANTED

A SUGGESTION has been made that the pictures of all past presidents of the Indiana State Medical Association be secured for the headquarters office. This was brought to the attention of the Bureau of Publicity, and the Bureau, through the executive secretary, Mr. Thomas A. Hendricks, has solicited the aid of Dr. L. G. Zerfas in making such a collection. A goodly number of photographs have already been located, but unless a complete file is obtained the plan will prove of little significance. We shall therefore appreciate the cooperation of persons who may have available photographs of former presidents, or who can give us information as to where they might be obtained. The list of those not yet in our hands follows:

#### SERVED 1849-1880

Asahel Clapp, New Albany	Vierling Kersey, Richmond
Jeremiah H. Brower, Lawrenceburg	Nathaniel Field, Jeffersonville
Elizur H. Deming, Lafayette	Henry P. Ayres, Fort Wayne
Daniel Meeker, LaPorte	Joel Pennington, Milton
Talbot Bullard, Indianapolis	Isaac Casselberry, Evansville
Nathan Johnson, Cambridge City	Wilson Hobbs, Knightstown
David Hutchinson, Mooresville	Richard E. Haughton, Richmond
John Sloan, New Albany	John H. Helm, Peru
John Moffet, Rushville	Luther D. Waterman, Indianapolis
Samuel M. Linton, Columbus	Louis Humphreys, South Bend
Myron H. Harding, Lawrenceburg	Benjamin Newland, Bedford
Wilson Lockhart, Danville	Jacob R. Weist, Richmond

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William H. Bell, Logansport	Jonas Stewart, Anderson
James H. Woodburn, Indianapolis	George T. MacCoy, Columbus
James S. Gregg, Fort Wayne	George J. Cook, Indianapolis
James D. Gatch, Lawrenceburg	David C. Peyton, Jeffersonville
Gonsolvo C. Smythe, Greencastle	George D. Kahlo, French Lick
Edwin Walker, Evansville	Thomas C. Kennedy, Shelbyville
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Kindly address communications to Dr. L. G. Zerfas, in care of the Indianapolis City Hospital, Indianapolis, Indiana.

# THE JOURNAL

OF THE

## INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL  
PROFESSION OF INDIANA

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FEBRUARY, 1934

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### EDITORIALS

#### THE PARENTHOOD OF THE DIPHTHERIA IMMUNIZATION CAMPAIGN

It is unfortunate that certain medical societies have not been able to understand who the father of the diphtheria immunization campaign really is. In times past certain activities of the old Indiana State Board of Health have been more or less obnoxious to the medical profession, and as a result any activities of the new Division of Public Health are liable to be interpreted in the same light.

The officers of the Indiana State Medical Association and also those in charge of the Division of Public Health are extremely anxious that it should be clearly understood that the campaign of diphtheria immunization was fathered by the organized medical profession itself. After the abolishment of the Bureau of Infant and Maternal Welfare of the old State Board of Health, it was agreed that the medical profession had won a struggle which had lasted for years. It was also agreed that something would have to be done by the medical profession to assure the public that the doctors are still interested in children. As the most pressing need of the time it was decided to put on an immunization campaign, if such a campaign could be arranged. This campaign would be one which would seek to get every child in Indiana immunized if possible. It was decided that those who could afford to do so should pay for such treatment, but that indigent children would have to be treated free. In nearly every county this arrangement has been understood and the doctors were glad to

donate their services for the immunization of indigent children, provided the state could furnish the immunizing material. It was by no means certain that the state could afford to do this, but when it was found that in the first four months of the present fiscal year the new Division of Public Health had saved \$42,000 as compared with the expenditure of the old Board of Health for last year, the Governor authorized the Division of Public Health to spend \$15,000 for vaccine virus and diphtheria toxoid to be used for the immunization of indigent children. That campaign is now getting away to a flying start, inasmuch as a large percentage of the counties are taking advantage of the opportunity. Material is being sent only to those counties in which the local medical profession has requested it.

It must be understood that the Division of Public Health is not intending to foster any sort of state medicine. Every man in the personnel of that organization is sincerely and bitterly opposed to that principle. If indigent children get sick, they either have to be cared for by the state (through the county or township), or they will be treated by some doctor gratis. It will be less trouble and expense for the profession and the state to prevent the disease, to say nothing of the better service to the child. If the local medical societies can find means whereby they may be paid for immunizing these indigent children, there is certainly no possible objection. They can not be paid out of the state fund because there is no legal provision for such an arrangement. Furthermore, that really would be state medicine. If a given physician does not wish to give his services he is quite within his rights, and if a given county medical society does not wish to accept the provisions of this campaign, it is quite within its rights. It is rather apparent at the present time that more counties are going to ask for the toxoid than there will be money to furnish it, and so obviously there is nothing to worry about. The county medical societies which want to put on a campaign may do so, and those which are opposed will be subjected to no pressure whatever.

The plans for this campaign were worked out carefully by the Advisory Health Council for the state, which is composed largely of physicians, the official staff of the Indiana State Medical Association, and the Division of Public Health. The last named organization has had nothing to do with the campaign except to furnish the immunizing material, distribute it, and assist with the publicity. The organization is extremely anxious that no child who can pay shall be treated free, and it is insisted, whenever possible and convenient, that each child be treated by the physician who would be designated either as the family physician, or if there is no family physician, the neighborhood physician. In no sense is the Division of Public Health wishing to come between the doctor and his patient, nor wishing to pauperize the public.



## KINGSBURY AT IT AGAIN?

John Adams Kingsbury, LL. D., of whom we have heard quite a bit lately, seems to be continuing his campaign for socialized medicine; together with Sir Arthur Newsholme, K. C. B., M. D., he has presented for the reading populace a new book, "Red Medicine." It is said to have been written after a study of present-day medicine in sovietized Russia.

In a news release recently sent out by the publishers, and rather widely commented on by the lay press, there is set forth a rather comprehensive review of the book. An opening declaration immediately attracts our attention when it speaks of the "fact" that socialized medicine "has removed the doctor almost entirely from the field of monetary competition, and has thus abolished a chief source of inadequate medical service."

A little further along the authors make the tacit admission that the present arrangements are far from perfect, but feel that the centralized power of sovietism will rapidly overcome the present defects and that soon nothing will be left to be desired. They refer with great gusto to the fact that in 1927 it seems that cholera was finally wiped out—get that, cholera was wiped out in the good year 1927! Smallpox and typhus are on the decline, but typhoid continues a menace. The morbidity from diphtheria and scarlet fever is found to be higher than in 1927 and 1929.

They also agree that the Russian system of home treatment of disease is not what it should be, due to poor housing conditions; they also make the interesting statement, "we had reason to doubt whether domiciliary medical calls for treatment, *when made* (italics ours), received prompt attention in all cases." This latter statement is of crucial importance when considering any form of socialized medicine, and should be borne in mind. It is quite evident that Russian physicians are human after all; they carry on just like other humans who are paid a definite sum for an unlimited amount of work!

Kingsbury, by this time, is pretty well known to medical men in his capacity as executive secretary for the Milbank Foundation Fund, which seems to be especially interested in matters pertaining to public health. Latterly, the Kingsbury efforts would seem to be almost wholly directed toward the socializing of medicine. Newsholme, after a very brief experience in actual practice, has spent his medical career almost wholly in public health work, much of which time has been spent in visiting various countries, all the while engaged in public health problems. It is but natural, then, that these men should approach the question from the viewpoint of public health men rather than from the professional side; it has long been our observation that one engaged wholly in public health work, with practically no direct contact with the practice of medicine, soon becomes possessed of the

idea that socialized medicine offers a definite panacea for all the ills of humankind.

We refuse to become excited over the results of state medicine in Russia; the medical world has long known that there was much room for improvement over there. During the Czaristic regimes the peasant class, which means most of Russia, was poorly cared for, medically. It is no wonder that disease amounting almost to pestilence prevailed.

We have read numerous articles describing medical conditions in Russia of the present, written by professional men and laymen; in not one of these have we noted such an optimistic trend as is indicated in "Red Medicine." That, of course, is not at all strange since the book in question is written by men whose viewpoint is very narrow.

However we may view it, the fact is that we must combat such tendencies as are exhibited in this book. Our reading public is devouring such material; many readers are accepting it as true gospel. Our medical press must attack this thing and attack it in no uncertain terms. We must admit, openly, that there is a schism between public health organizations and the various medical associations since this is very apparent to those who look into it. We cannot help wondering just what the attitude of commercial business men would be were they to be assailed as are members of the medical profession; the business interests whose profits organized the Milbank Foundation Fund probably would be a bit antagonistic to an organization or to a group of individuals who essayed a program looking toward the socialization of that industry.

We shall expect to hear more of Kingsbury and men of his type; it is up to us to be ready to combat their insidious propaganda.

## THE MATERNAL MORTALITY RATE

The recent report of the public health relations committee of the New York Academy of Medicine affords material for reflection on the part of members of our profession. This report covers an investigation of some two thousand puerperal deaths in New York City over a period of three years. The most astounding statement in the report is that some 1,300 of these deaths were preventable, and of this number but two per cent were charged to midwives. Sixty-one per cent of the cases are ascribed to the medical profession and the remainder allegedly to laxity on the part of the mothers themselves.

Six principal causes are listed as a result of the study:

1. Widespread use of anesthetics.
2. Decline in spontaneous deliveries.
3. Increase in the use of operative measures.
4. Caesarian operations.
5. Hospital and home deliveries.
6. The economic status of the patient.

What with the publicity the subject has had during the past few months, much of it based on illogical conclusions, the above report but adds to the public interest in the matter. For some months many of our magazines of the household variety have featured articles on the subject and now the lay press is having much to say, particularly about the above-mentioned report. Even our medical journals seem to have recognized that the subject is a live one and many comments have been offered as to the apparent cause of so many deaths during what should be a physiological process.

Gladys Huntington Bevans, writing in the *Chicago Tribune*, calls attention to the report and makes the following comment: "When the United States needs to be stirred up to do something about its high maternal death rate, it doesn't help matters any that an article should be written by the editor of the *Journal of the American Medical Association* pointing out that 'in the days of midwives and buggy doctors mothers got on fairly well, and in some instances better than present-day mothers.' . . . Such a statement is absurd and harmful at a time when we must rouse public opinion to the need of saving our mothers and babies from the dangers that now surround them at childbirth. . . . The medical profession will have to bring about a change in these conditions. But the expectant mother must do her part to save herself and her baby."

The above is but one instance of the many articles now appearing in lay publications; for quite some time the subject seemed limited to the monthly magazines; now that the daily press has entered into the discussion there is greater reason for the medical profession to make a strict investigation of the matter and set itself right before the reading public.

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### THIS SOCIAL SERVICE RACKET

Within the last month Indiana has become the sanctuary for a type of flora and fauna, as the case may be, known as "the trained social service worker." The female of this species may be more dangerous than the male, but at least it is not so aggravating. As found today flourishing and rambling almost at will under the growth of innumerable welfare projects that have sprung up during the emergency which we are forcing our way through, many high-salaried, federally-backed, and theory-filled youngsters have swooped down on Indiana and apparently have found a fertile field for their so-called "welfare" ventures and social experiments.

Now don't get this wrong. There are many fine, great-spirited, intelligent, common-sense men and women in social service work, but this new group is not the type which gets its traditions and inspiration from those courageous leaders. This

"trained" social service worker who has come into Indiana is a new phenomenon in these parts. You can spot the male as soon as he enters the office. He is usually gray-spatted and although he may never have been any farther east than Kankakee or Kalamazoo, his manner of speaking and his vocal modulations are a cross between a radio announcer who is striving to win a perfect diction prize and a mid-westerner's idea of how they talk at Harvard or Oxford. In other words, he is visibly and painfully affected, but that's part of the racket. He is far more interested in what degree a person may have than in what qualities he may possess. These new social service workers remind one very much of some of those newly commissioned second lieutenants during the World War who had just completed a ninety-day intensive training course and hence were ready to fill the shoes of Pershing, Leonard Wood, or General Bullard. Whatever the characteristics of these newly graduated social service workers may be, they are not shrinking violets. Confident and cocky, they ride roughshod over local traditions and customs, armed with classroom-manufactured rules and regulations in which they have the explicit faith of youth unhampered by experience. Their attitude toward any local man who is in social service work but who is not a "trained" social service worker is overbearing, no matter what the achievements of the local worker may have been and with what regard he is held by his fellow citizens. These new social service workers are long on bureaus and commissions and surveys, and only too often short on common-sense and real understanding.

Moved by a laudable yearning to uplift their fellow men, they choose social service work because they are too worldly to become doctors of divinity, and too comfort-loving to become doctors of medicine. They thrive in great quantities where and when there are fat-salaried jobs. Executive jobs on such truly worthwhile enterprises as community chests are their goal, and if not carefully watched, the entire organization of your community chest, no matter how efficiently it may be run, may fall into the hands of these "trained" social service workers. When one of them gets into an organization it apparently is an unwritten rule of his code to fill up as many positions as possible with his group—that is, men or women who have had their training, not out in the wide world of experience, but in his own particular postgraduate course in his own particular university. No matter how capable, well-equipped, and satisfactory your own local welfare workers may be, they may find themselves ousted at any time by these outsiders wherever and whenever they become strong enough.

But why has all this so suddenly become of concern to the medical profession of Indiana? There isn't a physician in the state who hasn't, at some time or other, given generously of his services free



of charge to promote some project that is sponsored by social service and welfare workers. There isn't a physician but who will gladly continue to do his part. Why can't we maintain our good humor and continue to laugh at the ridiculous spectacles and visionary and impractical plans that some of these "trained" youths are so keen to promote? Simply because our eyes are open at last to the fact that many of these youngsters who are being turned loose in Indiana today are roving disciples of none other than C. Rufus Rorem, erstwhile of the "Committee on the Costs of Medical Care" fame with its group medical insurance promotion, and who more recently, since that lamented project has gone on the rocks, has become America's most active advocate of group hospitalization. No matter how pleasant and charming personally these serious-minded, world-uplifting, usually utterly humorless youths may be, when they come into your communities watch them closely lest they sell the medical profession, and in the long run, the public, short.

## EDITORIAL NOTES

NOTES from the Secretaries' Conference were too late to be used in this issue of THE JOURNAL. A report of the meeting will be published in the March number.

EVERY member of the Indiana State Medical Association should read the report of the Council which appears in this issue of THE JOURNAL on page 89.

THE Vanderburgh County Medical Society has asked for a postgraduate course during this year, and the request has been granted by the Council. Due notice of the date for same will be given in THE JOURNAL.

THERE are but two Indiana counties outside the pale of organized medicine: Starke County, with eight physicians, and Brown County, with but one physician. Two members of the former county hold memberships elsewhere. Efforts are to be continued toward having every county organized.

OUR Association membership record for 1933 is something of which we may all be proud; during the height of what is generally regarded as an all-time record depression, we show a net membership loss of *eighteen*! We daresay few states can present a comparable record.

THE Council has voted to continue the scientific exhibit at our annual meetings, which announcement will be received with pleasure, we are sure. The committee in charge is to be congratulated on

the success of this venture and we are promised an exhibit of increasing interest for the coming meeting.

INFORMAL reports from our Councilors indicate medical affairs over the state to be "on the up." There was a distinct note of cheerfulness in most of the reports presented at the recent Council session. There were a few instances discussed in which all was not quite so well, but on the whole the outlook seems much more hopeful than at any time during the past few years.

THE Indianapolis Medical Society, at its meeting of January ninth, provided what seems to us a most diverting program, that of having two prominent members of the local bar discuss legal questions in which our profession is mightily interested. We would recommend this feature to other societies, believing such a program will prove of great interest to physicians.

THE *Little Journal for Pediatricists* quaintly says, "The fear that men have of being taken for what they are not is amusing. It spoils potential sales of spats and gardenias." Many men of our acquaintance are going about this winter with cold ankles, lest they be taken for what they are not. As for us, we have lately adopted the dark colors in spats, hence our identity remains undisturbed.

THE financial affairs of the Association are in much better shape than they were a year ago; the treasurer, with an ear-to-ear grin, announced that we closed the year of 1933 without the use of red ink. THE JOURNAL also came out with a clear record, the balance being small but on the right side of the ledger. All of this is most pleasing to us for we note that many other state societies are in the red.

WE HAVE been attending Council meetings for many years and declare the meeting of January fourteenth to be the high water mark of all that time. Just 100% of the membership were present and for several hours devoted the strictest of attention to the longest agenda we have ever seen laid before the Council. The Indiana State Medical Association has every reason to be proud of its present Council.

IT IS not too early to begin planning to attend the A. M. A. meeting at Cleveland, June eleventh to fifteenth. Preliminary announcements indicate that this will be a meeting of more than ordinary interest. Cleveland has most excellent facilities for such large gatherings, the Auditorium being one of the best in the country. Hotel accommodations are quite sufficient for the occasion. It might be well to make your hotel reservations right now.

A REPORT recently made by Dr. V. K. Harvey, Director, State Division of Public Health, proved to be a most interesting and exhaustive study of the various health problems now being considered by his organization. It would seem that Dr. Harvey has a most thorough conception of the health needs of Indiana and his pronouncements as to future plans proved most interesting. One thing that particularly strikes our fancy is the plan to restore our lakes and streams; too long have they been made cesspools and sewers.

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INDISCRETION in keeping one's medical journals out of the waiting room and in general away from the layman has been noted to the disadvantage of the profession. It is distasteful at least, even nauseating, to see in the lay press that some individual decries procedures such as vaccinations because he has read some criticism in a recognized medical journal not appreciating the scientific approach and the methods by which we clarify conflicting ideas and overcome unwarranted enthusiasm on the part of our hard working brethren.

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AT THE recent mid-winter meeting of the Council of the Indiana State Medical Association there was an attendance of one hundred per cent. Including the officers and the councilors, twenty-four invitations were issued, and twenty-four were present. For more than five solid hours they listened to reports on medical affairs as pertained to the various districts, engaged in solemn debate on pending problems, and took counsel one with the other. Not always in immediate accord during the discussion, so broad-mindedly were the various projects discussed that unanimity of opinion as to the proper procedure always was attained.

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GENERAL arrangements for the Indianapolis session, in October, were recently under discussion, and it seems settled that a few changes will be made in the usual plan for our annual meeting. Instead of delaying the annual dinner until the very last day, when so many attending members want to get back home, it will be held on the evening of the second day. The usual stag program will be carried out, much to the liking of most of our membership. The change of some two weeks in the time of the meeting will also be of material benefit, we hope, inasmuch as of late years we have had some extremely warm weather the latter part of September.

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ONE retiring secretary, after completing his eighth year at the post, makes the following comment: "While I feel that secretaries can be changed too often, it is not entirely desirable that they be carried too long. Contact with the state organization makes one appreciate the value of that organi-

zation to every practicing physician in Indiana, and should be shared by as many men in each county as possible. There are no greater returns to be had from a seven dollar investment than those coming from the Indiana State Medical Association activities." Make your investment now—1934 dues are due.

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LOOKING over the meeting reports of the Carroll County Medical Society these past few months, we have come to the conclusion that these folks are a bunch of go-getters de luxe. They import speakers, of the Indiana variety, for almost every meeting, and we daresay their attendance and interest are in full accord with their hyper-activity. Wonder what the spirits of Drs. Kelsey of Wildcat, Dr. Trobaugh of Cutler, Dr. Sharrer of Delphi, and Dr. Armstrong of Camden, together with the host of other oldtimers of our memory, would think were they able to drop in on one of these modern meetings. We have a warm spot in our heart for Carroll County, especially that section known as Monroe and Democrat townships.

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THE headquarters office gives us the information that on February first of each year, the date of beginning delinquency in the payment of annual dues, about 1,800 members are paid up, which amounts to two-thirds of the total membership. This means that one-third of our folks are willing to take the chance that delinquency brings. We should say that more than half this number is wholly dependent on the State Association for medical defense; it should be remembered that medical defense does not apply unless the member involved is in good standing *at the time the services were rendered and at the time the suit is brought*. A little more attention to this matter of detail may save many of our folks no little embarrassment.

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A RECENT issue of the Indianapolis *News* contains the interesting notation that the Central Chiropractors' Association has passed resolutions against the state-wide campaign of immunization now being carried on; they especially object to the door-to-door method of carrying information to all parents and call attention to the state law providing that no child may be required to submit to medical examination or treatment, if the parents or guardian objects thereto. We opine that this resolution will have little or no effect on the campaign now being carried on; parents are health-wise, these days; they are pretty well up on present-day methods and preventive measures and the very great majority will grasp every opportunity to preserve the health of themselves and their families.

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PERSONS who have worked individually with large groups of patients for diphtheria immunization cannot refrain from issuing a warning in the



present campaign. Whether for public health measures or for practice among private patients the Schick test stands out, to some of us at least, as the architecture of the whole campaign. The tendency of immunization to make possible more unrecognized carriers, and the failure of the injections as carried out to immunize practically 100 per cent of the subjected, puts in position the aperture for a merited reaction in the next few years. This is avoidable by a little extra work in acquainting oneself with the technique of the test, and a calendar record of the clients with a check accompanied by the same enthusiasm as the original campaign.

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THE American Medical Association publishes a small pamphlet outlining the principles of medical ethics. It should have a place on every physician's desk, perhaps even on the table of the waiting room for information to the laity. Be smart. Look about you. Analyze every successful physician you know. Why is he successful? (Please distinguish between financial and professional success.) Why is he loved and respected by his patients and by his fellow-doctors? Because he is a hard, conscientious worker, because he has developed his native ability, small or large though it may be, to its optimum advantage, and, finally, equally important, *knowingly or not*, because he lives and conducts himself in accordance with the Golden Rule, nothing more nor less than our Code of Medical Ethics.

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THE Indianapolis Better Business Bureau *Bulletin* for December cites a new and unusual form of racketeering in connection with men's hats. It seems that for the past four years or so there has been an increasing volume of business done in made-over hats. An investigation shows that one chain store organization, operating 1,472 stores, has been interested in such a venture. Testimony in the hearing of the case brought out the information that practically every man entering a store to buy a new hat asked for "a hat" rather than "a new hat." Twelve men were selected at random to serve as witnesses in the case and each testified that, to the best of his recollection, he had never asked for "a new hat." The Federal Commission held that the practice of selling made-over hats as new hats should cease, notwithstanding the fact that there had been no direct representation that the article was new.

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How's this for a radio broadcast, made in the State of Indiana during the peak of a campaign for immunization against diphtheria and vaccination against smallpox! The broadcast was one of a series of six weekly "chats" by an M. D. who graduated some forty years ago but who seems to have been in regular practice a matter of two or

three years. Here is a choice bit from his screed: "There is no more foul, vicious or criminal practice 'fostered' upon the people by big business than this inexcusable, damnable, pernicious, and utterly inefficacious poisoning of the blood of human beings by useless serumization and vaccination." Yes, sir! the above was handed out over a northern Indiana station just a few weeks ago. Complaint was registered with the station owner who declared he was not in sympathy with such expressions and that at the end of the contractual period the speaker would be forever barred from that station.

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THE rank and file of the medical profession in Indiana may read with justifiable pride and satisfaction the names of the officers and committeemen, as published monthly in *THE JOURNAL*, into whose hands are entrusted the affairs of our State Association. Their election or selection to these places of honor and of trust was not the result of mere accident; neither did it eventuate from any mysterious cut or shuffle or deal of the political cards. They are there because of their ability to serve, because they have proven their capacity to work, even under adverse stress, because of their record of unselfish zeal for the medical profession, and because they are veterans of many a hard battle. Not always the winners, but learning even in defeat, these men well may be trusted with our interests while municipal, state, and federal authorities continue their never-ending monetary and social experiments on 130,000,000 citizen-guinea-pigs. Not every state is as well organized as is our own Indiana; in fact, but few states excel, as we easily rank within the first five or six. Even in Washington, itself, the judgment of our leaders often is asked in regard to impending rulings and legislation. Yet, with it all, needed more than anything else is the unprejudiced, constructive help of every single doctor practicing medicine in the State of Indiana.

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NOT so very long ago the members of a certain county medical society were thrown into a state of seething turmoil because the editor of the local daily newspaper persisted in the publication of doctors' names in connection with accident, obstetric, and operative patients. Controversial animosities blazed hotly, jealousy was rampant, and even violence between doctors was threatened. The editor of the newspaper was interviewed and found to be a gentleman of more than ordinary ability and understanding. A discussion of medical ethics easily convinced him that the above policy was almost *lèse-majesté* in his own city, to say nothing of poor taste; that the fact that Mrs. John Doe had a baby might be enlightening news but the fact that Dr. Smith-Jones attended her was not of paramount interest; that the presence of a well-organized medical society was a highly desirable

community asset; that a happy and prosperous medical profession would be able to render a better service to his own (the editor's) family and the families of his friends; and that it was his duty as a public-spirited citizen to safeguard the weal and well-being of the community at large which his newspaper served. Where situations such as the above exist, disunity and chaos are the inevitable results. Adroit approachment of the individuals at fault often awakens a spirit of willingness on the part of newspaper paragraphers to cooperate with organized medicine.

IN THIS day and age of rapidly advancing progress in medical research, every doctor should feel duly humble in his own mind at his own lack of knowledge and at his own limited ability, because "he who knows not and knows that he knows not is wise;" yet even in these kaleidoscopic times, before the public, every physician should walk proudly forth, chin up, chest out, shoulders squared to the world. Why? Because he is a member of one of the oldest, if not actually the oldest and the most honorable of professions; because he is (or should be) the smartest, the brainiest, and the most intelligent man in the community in which he lives, because of his college training, his professional education, and his knowledge of human psychology in its various behavior patterns; because down through the centuries, individually and in groups, he has governed his conduct, both toward his public and toward his professional brethren, by a most marvelous code of ethics, a code which has withstood the buffeting of many, many storms only because it is *right*; because in every world crisis, be it war, flood, destruction, pestilence, depression, or what-not, doctors ever have borne their full share with courage and determination, have been sought after for sage advice and for prudent leadership; and, finally, every doctor should be proud that he has the well-earned and almost sacred privilege, through his county and state societies, of belonging to the most solid, the most influential, and the most powerful professional organization now in existence. Exaggeration? No!

DURING the past few weeks the public press has carried an enormous amount of propaganda against the Copeland-Tugwell Bill, because of the fact that advertising would have been greatly curtailed had the original bill gone over; hence it is refreshing to read a sane discussion of the matter in one of our dailies, the *Indianapolis Times*. The following presents a very fair and lucid discussion, one with which most physicians will heartily agree:

*"Purer Foods and Drugs.* There appears to be no major disagreement on the proposition that the Pure Foods and Drugs act should be strengthened for more adequate consumer protection. The only question is how drastically the present law should be changed.

"The administration proposed a complete revision of the law last spring. Immediately protests arose, not alone from

manufacturers of food and drugs, but also from sales and advertising agencies.

"The drug trade proposed its substitute for the Tugwell bill after heated hearings. And then Senator Copeland, himself a doctor, drew a compromise bill which, he says, retains all the consumer protection sought in the original bill, but abandons the more drastic features of that measure.

"We believe that this is the time to strengthen the pure foods and drugs law. We likewise believe that the Tugwell bill contained several doubtful provisions. The objectives of that bill—to assure that consumers will get foods and drugs honestly manufactured, honestly labeled and honestly presented for sale—can be attained by less drastic means.

"All legislation is a matter of compromise; and a revision of the pure foods and drugs laws is liable to be the result of the agreement between vigorously contending forces.

"The honest and intelligent majority of manufacturers of foods, medicines and cosmetics should realize that revision of the law to provide adequate protection of consumers is as important to them as any one else. The dishonest manufacturer and advertiser, unless curbed, will ruin the reputation of the industry as a whole and destroy the market of the honest majority."

Recently president Padgett took occasion to remark on the subject of Indiana men for Indiana programs, with which idea we are, for the most part, in accord. We have felt that our component societies too often use out-of-state speakers when, as a matter of fact, Indiana is prepared to furnish talent for almost any meeting. Our notions along these lines have been more firmly entrenched after looking over the back page of the December number of the *Bulletin* of the A. M. A. Even a casual perusal of the list of officers of the parent organization is somewhat intriguing to Indiana physicians, for the reason that not once does Indiana appear on the page. Illinois comes to the front with 17 names, not including the A. M. A. officers, such as West, Fishbein and the heads of various departments. New York comes along with twelve assignments. Connecticut, one of our smaller states, has the sizable total of ten assignments; Massachusetts has the same number. Minnesota shows nine places; Ohio, eight; Pennsylvania, seven; Wisconsin, six; District of Columbia, five. California, Louisiana, and Georgia have four assignments each; Nebraska, Alabama, and Tennessee three each; and Iowa and Maryland have two each. There are seven other states with one place each. Come to think of it, Indiana has had very little official recognition from the A. M. A. for some years past; we do not recall more than two or three official positions, elective or appointive, that have come our way for some time. Just why this should be is past our understanding; we have had the notion that Indiana, medically speaking, was quite some state, that our folks were up and coming, and that they keep right up with the procession. While we do not recommend going into politics—and politics plays its role in medical affairs as well as elsewhere—we do feel that the "big shots" of the American Medical Association might occasionally recognize the fact that there is a State of Indiana and that it is no mean State, medically.



## THE PRESIDENT'S PAGE

As you are well aware, our National Congress assembled January third. From all indications, the attitude of this body during the present session will be somewhat different from that shown in the special session just preceding. At the time of the last meeting, there had just been inaugurated a new President. The condition of the country had been described by many as near chaos. It seemed to those in power that many things should be done, and done quickly. In order to facilitate matters, the President felt it imperative that he should have a free hand, and it was the will of Congress to extend such freedom of action to him. This was done without stint, and with very little opposition.

As a result of this freedom of individual power, many unheard of actions were taken, and changes came so rapidly that a certain amount of confusion must necessarily result. Not the least of these moves was the drastic action of curtailing governmental expenses, which was evidenced by the passage on March 20, 1933, of the Economy Act, whereby drastic cuts were made in all government expenses. The item of most interest to the medical profession was the curtailment of veterans' allowances, which resulted in a saving of \$400,000,000 annually, and which automatically and materially curtailed the hospitalization of veterans with non-service disabilities.

There were introduced in the first session of the seventy-third Congress, 8,685 bills and resolutions. In only a few of these do physicians, as such, have any particular interest. To name only a few of these, we shall class them under the heading of

### GOVERNMENT COMPETITION IN THE PRACTICE OF MEDICINE

#### 1. The Shannon Special Committee Report.

As early as September, 1932, a representative of the A. M. A. entered a protest before the Committee at a hearing in Washington. After a comprehensive survey, the Committee summarized the testimony as follows: "The general trend of the testimony was to the effect that the Federal Government discontinue its present practice of buying medical service and hospitalization in bulk, at the expense of the taxpayers, and distributing them gratuitously in competition with physicians and hospitals that depend for their very existence, on the income to be derived from caring for, and the treatment of, private cases; the beneficiaries of the government gratuity being persons who are suffering from no debility incurred in any public service, military or civil."

2. Veterans' Hospitalization. "The Committee recommends to the veterans' administration that the ends of economy would be best served by using private, municipal and other hospitals for patients, rather than provide additional new governmental hospitalization at greater outlays."

This report, while generally favorable to physicians and hospitals, has reached only the stage of being printed, and it will in all probability come up for further consideration. Any changes in veterans' affairs at this time will very likely restore some of their lost benefits.

3. Additional Benefits. Four bills, S. 1831 of Minn., H. R. 5866 and H. R. 5882, Smith, Washington, and H. R. 5908, Gray of Indiana, propose to reenact all public laws granting medical or hospital treatment, domiciliary care, compensation and all other allowances, pensions and retirement pay to veterans that were repealed by the Economy Act of March 20, 1933. We all know how ready our own senior senator from Indiana is to introduce such a bill.

4. Additional Hospital Facilities. Nine bills are pending, proposing to erect new hospitals for veterans, or to enlarge existing hospitals. All these bills are pending in the House Committee on World War Legislation. These bills call for locations of new hospitals in various widely separated areas of the country, and concern us in Indiana only indirectly. Of more immediate concern to us is one of these bills, H. R. 1551, introduced by Representative Ludlow of Indiana, proposing to authorize the appropriation of \$600,000 to erect a 150 bed addition to U. S. Veterans' Hospital at Indianapolis.

At the time of this writing, our private hospitals are operating at something near 50% of their capacity, and struggling for their very existence.

On January 5, 1934, the President presented to Congress his budget. In this, true to his ideas of economy, he recommended a continuance of the cut already made in veterans' expenditures. In the fiscal year 1932-1933, before the Economy Act, the Government paid \$184,503,084 for service-connected cases and \$85,016,145 for non-service-connected cases. The present budget recommended \$116,462,722 for service-connected, and \$11,903,024 for non-service cases. This is a decided cut, but a slight increase of the recommendations for 1934.

The public press of recent date remarks, in regard to the above, that those on Capitol Hill are withholding comment. However, on January 6, 1934, the press has the following to report, after commenting on liquor bills: "Not a few of the new bills introduced today sought repeal of the Economy Act, restoration of government pay cuts and of veterans' benefits, and payment of soldiers' bonus."

This should indicate to us the direction from which the prevailing winds are blowing and it also indicates, plainly, our duty. Write your senators and representatives. Write them individually. Write them collectively as a county society. Then write them again.

*E. E. Padgett.*

## SECRETARIES' COLUMN

I hope by the time this is published every Secretary has collected his dues 100 per cent.

How many society secretaries have fully understood all the news in the journals about the F. E. R. A., C. W. A., State Health Program and Group Care, and the part the physicians are to play in this program? If you attended the Secretaries' Conference on January 21st you should know what it is all about. It is essential that every physician should have a clear understanding of these subjects. When we can have such men as Davis, Bauer, VanEtten and Schwitalla tell us about the problems that are before the physician, we are very fortunate, and it behooves us to listen to their side of the story. They are broad-minded and can present the problems from every angle. I hope that the next Conference will be better than this one, if such a thing is possible.

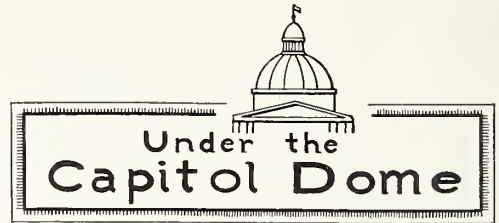
How many county medical societies have studied the Detroit Plan for the care of the indigent sick? I believe that the physicians should be cognizant of this plan. It will help a lot in your plan for the care of the indigent sick, regardless of who pays the bill. It stops free clinics. You can get the information, I am sure, if you will write to the Wayne County Medical Society, Detroit, Michigan.

The complete report of the Secretaries' Conference will appear in the March issue. The conference was held too late in the month to get the report in this issue.

I understand that more than sixty counties in the state are carrying on the diphtheria and small-pox immunization plan in connection with the Division of Public Health of the state. I hope all the county societies will carry on the plan. This will show the philanthropists that the state of Indiana is taking care of the health of its citizens.

Dues for 1934 are past due.

A. M. MITCHELL, *Chairman.*



Crimes in which the mental condition of the perpetrator may have played some part showed a marked decrease during the year 1932—the last for which statistics are available—as compared with the year preceding, according to a report recently completed by Albert E. Dickens, state statistician. The report, which was based entirely upon Indiana court records, showed that sex offenses, not including rape, brought 2,890 persons into the courts as compared with 3,153 in the preceding year. These sex offenses amounted to 3.73 per cent of the total 77,520 criminal cases filed in the state's courts during that year. In 1931 they amounted to 3.25 per cent of the total. Charges of rape brought 296 persons into court, as against 391 during the preceding year, the report showed. This charge totaled .38 per cent of the total number of criminal cases in the courts in 1932, while it amounted to .34 of the total in the preceding year. There were 31 persons charged with violating drug laws in 1932 while in 1931 there were 39. Offenses against the family and children resulted in 1,847 criminal cases during 1932, as against 2,415 in the year preceding, the report showed. Other crimes showed a corresponding decrease, the total number of criminal cases in the state's courts dropping from 96,955 in 1931 to 77,520 in 1932.

In connection with the general decrease the statistician said: "In the absence of more concrete data, and since human behavior can not always be expressed in terms of figures, it is difficult, if not impossible, to determine whether the sharp reduction in cases filed in 1932 is attributable primarily to closer observance of the laws by the people; to lenity on the part of the enforcement agencies, or to other factors. Many observers are of the opinion that lenity of the enforcement agencies is largely responsible for the decrease in the cases brought into the courts; that many law infractions were condoned because of the economic circumstances motivating the violations."

Dr. J. W. Bowers, of Fort Wayne, was re-elected president of the state board of medical registration and examination at the board's annual organization meeting Tuesday, January 2. Dr. Leslie C. Sammon was elected vice-president; Dr. William R. Davidson, of Evansville, was again chosen secretary, and Dr. Cecil VanTilburg, of Indianapolis, the chiropractor member of the board, was re-elected treasurer. The meeting was the first



attended by two new members of the board, Dr. Earl O. Peterson, of Laporte, osteopathy representative on the board, and Dr. N. E. Harold, of Indianapolis. Dr. F. S. Crockett, of Lafayette, old board member, also attended the session.

Seven physicians were admitted to practice in Indiana through reciprocal license agreements with other states.

Those admitted, together with the states from which they came and the cities where they will practice were:

Dr. Robert D. Smith, from Utah, to practice at Crawfordsville.

Dr. Robert M. Evans, of Missouri, to practice at Russiaville.

Dr. George E. Ellerbrook, from Kentucky, to practice at Vevay.

Dr. Charles T. Duchess, from Michigan, to practice at Walton.

Dr. C. E. Davis, from New York, to practice at Lewisville.

Dr. Orval J. Miller, from Ohio, to practice at Fort Wayne.

Dr. Arthur N. Ferguson, from South Dakota, to practice at Fort Wayne.

The state board of medical registration and examination issued seven licenses to practice drugless healing during the past two months. Several forms of drugless healing were represented among the successful applicants.

Physicians will be interested in the following bulletins (60 and 61) from the Indianapolis office of the Indiana C. W. A. These bulletins are addressed to Civil Works Administrators.

January 17, 1934.

#### THE SELECTION OF PRIVATE PHYSICIANS FOR COMPENSATION WORK

The list of physicians and surgeons (Form CA-76), designated to provide treatment, where federal government medical facilities are not available or are inadequate, was for temporary guidance only, as indicated by Bulletin No. 43 of December 26, 1933.

Local administrators are instructed to consult the officers of their county or district medical societies at once to enlist the societies' cooperation as follows:

1. Ask them to share with you the responsibility of preparing a list of the local physicians authorized to provide treatment to supplement federal medical facilities when these are not available or are inadequate. This list should include physicians in the locality (whether members of the local medical society or not) who are well qualified by training and experience to render compensation service, who are licensed to practice medicine in

the state, and who desire to participate in this service under the regulations of the United States Employees' Compensation Commission. These regulations provide for fees not in excess of those charged by physicians generally to patients in the same income class as the injured person.

2. Have them indicate on this list physicians who, by training and experience, are especially qualified to handle unusual and special types of cases.

3. Request that they work out with you a proper plan, mutually satisfactory for distributing the compensation work among the physicians on the list in as equitable a manner as possible. Any plan should provide for the immediate treatment of emergency cases, and for treatment by physicians well qualified to handle the particular type of case. A cumulative record should be kept which will show the number of cases which have been assigned to each physician on the list.

The above instructions are issued with the authority of the United States Employees' Compensation Commission.

WILLIAM H. BOOK, Director,  
Indiana Civil Works Administration.

January 17, 1934.

#### SELECTION OF HOSPITALS IN COMPENSATION CASES ARISING OUT OF INJURIES TO EMPLOYEES OF THE CIVIL WORKS ADMINISTRATION

1. Employees of the Civil Works Administration who suffer injuries while in the performance of duty are entitled to necessary hospital care for the treatment of conditions due to such injuries. An injured employee shall be admitted to and retained in a hospital only as long as hospitalization is necessary for the purposes of treatment or examination. The instructions herein prescribe the procedure to be followed in selecting hospitals for the treatment of these cases and the schedule attached shows the rates to be allowed for hospital care. In no event, however, should these instructions be construed so as to interfere with the prompt and adequate care of an injured employee.

2. Injured employees must be referred to federal hospitals when such hospitals are both available and adequate. It is not intended to utilize these governmental facilities for civil works employees to the disadvantage of other classes of beneficiaries that may be entitled to care in federal hospitals, but that beneficiaries for whom the respective federal hospitals were primarily established shall have preference in the use of such hospitals. However, maximum use should be made of any existing federal medical facilities that may be available.

3. (a) When federal hospital facilities are not available or adequate, cases requiring immediate hospital care shall be sent to the nearest suitable hospital which desires to participate in the service

at the rates specified in the approved schedule of rates. Public hospitals, other than federal, are not to be given preference.

(b) The following factors should be considered in determining suitability: the proximity of the hospital, type of service, e.g., whether the hospital is well qualified to handle the special type of case, and the general quality of service.

(c) You should secure advice as to the suitability of local hospitals from one or more of the following local sources: medical advisory councils which may already be set up under Rules and Regulations No. 7, of the Federal Emergency Relief Administration; hospital associations; hospital, health or similar councils; county medical societies; boards of public welfare or health.

4. (a) All hospital care must be authorized in writing by the proper officials on the staff of the local Civil Works Administrator. Care of emergency cases should not be delayed for a written authorization, but this must be furnished within 48 hours after admittance to a hospital.

(b) An authorized physician in charge of the treatment of an injured employee as a compensation patient when hospital care is required, may send the patient to a hospital of the physician's selection provided the hospital thus selected agrees to the approved schedule of rates. However, hospitalization in such cases must be approved in writing as provided in paragraph 4 (a).

5. The Commission reserves the right to have its medical representatives examine patients at the hospital and examine the records of these patients and to cause the patient's removal when the Commission considers it necessary in the interest of the patient or to prevent overcharge, or for other sufficient reason. Hospital records of these patients shall be open to inspection by representatives of the Commission.

6. The Commission, in conference with representatives of the National Hospital Associations, has agreed on a basic rate for the care of injured Civil Works Administration employees in general hospitals, exclusive of federal hospitals. This rate includes many items for which extra charges are usually made. A schedule of rates for other services which are not included in the basic rate has also been agreed to. The National Hospital Associations have agreed to notify their members of these approved rates and urge their full cooperation with the Commission. The approved schedule of rates is attached hereto. Charges for services previously rendered will be adjusted under this schedule. (See paragraphs 34 and 35 of Civil Works Administration Rules and Regulations No. 5 for instructions concerning submission of vouchers.

7. Each local administrator must make adequate provisions for the transportation of seriously injured employees to obtain medical treatment, by arrangements made in advance for each work project. This may be done by arrangements for the use of automobiles available at the project, by

agreement concerning the use of local ambulance services or such other arrangements as may be feasible. Ambulance service provided by hospitals is covered in the approved schedule of rates.

The above instructions are issued with the authority of the United States Employees' Compensation Commission.

WILLIAM H. BOOK, Director,  
Indiana Civil Works Administration.

A schedule of hospital fees has been agreed upon between the joint committee of the American, Catholic and Protestant Hospital Association, the Civil Works Administration, and the United States Employees' Compensation Commission.

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CORRECTION: On page thirty-three in the January issue, under the heading "Treatment of Syphilitic Indigents" the statement was made that "health officers have authority under Indiana laws to administer antisyphilitic medical treatment . . ." The statement should have been "health officers have authority under Indiana laws to *authorize* antisyphilitic medical treatment . . ." for the cost of the treatment is a valid claim against the various taxing units. In the original article the reader gains the impression that health officers may administer treatment and legally charge for it, which is not the case.

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#### ARSENICALS FOR THE INDIGENT

The Indiana Division of Public Health is formulating plans for the purchase of neoarsphenamine and sulpharsphenamine for free distribution to physicians of Indiana and the Public Health Venereal Clinics in the State of Indiana for the treatment of indigent infectious venereal patients. This material will probably not be ready for distribution until the latter part of February. At that time it is the intention to circularize all the city, county, and town health officers in the state, and also the Public Health Venereal Disease Clinic Directors, informing them that this material will be mailed upon request direct from the office of the Division of Public Health, and the arsenicals will be furnished upon receipt of the completed requisitions provided by that office, after they have been countersigned by local health officers. These arsenicals will be supplied only for patients who are in a stage of infection or period of life which endangers other individuals or progeny. In health jurisdictions where Public Health Venereal Clinic facilities are available indigent patients will be required to report to their local Public Health Clinic to receive anti-syphilitic treatments. Operating expenses will not permit the Division of Public Health to furnish free arsenicals to private physicians in the same health jurisdiction where Venereal Disease Clinics are financed by city and county appropriations.



The Indiana Division of Public Health will soon publish a pamphlet which presents in concise form information on the various phases of medical treatment for venereal patients. This pamphlet will be published for distribution to all the physicians in the State of Indiana, and a supply will soon be mailed to the secretaries of county medical societies. Dr. A. F. Weyerbacher, Dr. F. M. Gastineau, Dr. Jane Ketcham, and Dr. Max Bahr collaborated in this publication, and it is to be hoped that this pamphlet will be helpful to many members of the medical profession, and that it will assist the Indiana Division of Public Health in its effort to reduce the prevalence of venereal diseases. The names of the physicians who prepared this pamphlet will not appear on the publication. Adequate medical treatment for the infectious venereal patient is the best possible protective measure from a public health standpoint.

THE STATE LABORATORY DISCONTINUES TISSUE  
DIAGNOSIS

At the recent meeting of the Board of the Division of Public Health it was decided that tissue diagnosis is not properly a public health project, and it was decided that after March first no more tissue examinations would be made by the laboratory excepting when they were needed for purposes of controlling communicable disease. The laboratory, of course, will continue to examine tissues and diagnose them for the state institutions. This decision should close a long controversy which has caused considerable disturbance for several years. The laboratory has no desire to enter into competition with private medical practice. Furthermore, it does not have funds to do so. We hope that doctors having tissues for examination will send them to private laboratories which make a business of such work. We have been assured by the laboratory men, themselves, that they will be willing to run tissues on indigent cases without charge, provided the doctor sends his pay cases to the same laboratory.

DIPHTHERIA REPORT FOR DECEMBER,  
AND FOR THE YEAR 1933

Final reports for the year 1933 show that we approached but did not equal the low years of 1930 and 1931, in which years there were 137 deaths from diphtheria in each instance. For 1933 there were 148 deaths, and during 1932 there was a total of 172 deaths. The month of December, 1933, showed 28 deaths, three different counties, Knox, Lawrence and Marion having three deaths each. Franklin, Gibson, Greene and Warrick counties showed two deaths each. Crawford, Franklin, Martin and Scott counties are in the black list for the first time.

Below will be found a corrected list showing the counties that have had deaths from diphtheria, and the number of each in every instance, also the rate per 100,000 population is given. It is interesting to note that thirty-eight counties in the state have had no deaths whatever; of course, their death rate was zero.

A comparison of the other counties is interesting. Bartholomew County has the highest rate with seven deaths and a rate of 27.4. This is medieval and the occasion for no small chagrin on the part of that county. Next is Warren County, which has a rate of 21.8. A glance through the figures will show that a number of counties stand between 15.0 and 18.0. Such rates are also most unsatisfactory. Marion County, with fifteen deaths, has a rate of 3.4, which compares favorably with the state rate of 4.4. Just the same, Marion County is considerably above the last two or three years and we very much hope that it will show a marked decrease during the coming year. The rate for Saint Joseph County is particularly to be praised, considering the size of the city of South Bend which is located in that county. They had one death, with a rate of .5. Lake County does nearly as well with a rate of .7.

It is very interesting to note that there is good evidence in this list of the efficacy of immunization. For example, Dearborn, Jefferson, Posey, Clay and Spencer counties put on excellent immunization campaigns last year and none of them have had a death. Also Lake and Saint Joseph counties have put on efficient programs, and have extremely low death rates, being very much lower than for any other urban communities. This gives us ground for hoping that with the present state-wide immunization campaign, death rates for next year will be materially lower than they have been during 1933. We believe that the list given below is worthy of study.

If your county is not named, it means there were no deaths from diphtheria during the year 1933.

County	Decem-ber 1933	Total for 1933	Death Rate per 100,000 1933
Adams .....	0	1	5.0
Allen .....	1	9	5.8
Bartholomew ....	0	7	27.4
Blackford .....	0	1	7.3
Clark .....	0	1	3.2
Crawford .....	1	1	9.8
Daviess .....	0	2	7.7
Delaware .....	1	2	2.8
Dubois .....	0	1	4.8
Fayette .....	0	2	10.1
Floyd .....	0	1	2.8
Fountain .....	0	2	11.1
Franklin .....	2	2	13.7
Fulton .....	0	2	13.2
Gibson .....	2	3	10.2
Grant .....	0	1	1.9

Greene .....	2	5	15.8
Hamilton .....	0	2	8.5
Hancock .....	0	2	12.0
Harrison .....	1	2	11.5
Howard .....	0	1	2.1
Jackson .....	0	4	16.8
Jennings .....	0	1	8.4
Knox .....	3	4	9.1
Kosciusko .....	1	2	7.2
Lake .....	0	2	.7
Lawrence .....	3	6	16.1
Madison .....	0	1	1.1
Marion .....	3	15	3.4
Martin .....	1	1	9.8
Monroe .....	0	2	5.1
Morgan .....	0	1	5.1
Noble .....	0	1	4.4
Orange .....	0	1	5.6
Owen .....	0	1	8.8
Parke .....	0	1	6.0
Perry .....	1	2	12.0
Pike .....	0	2	12.2
Randolph .....	0	1	4.0
Ripley .....	0	2	11.0
Scott .....	1	1	15.0
Shelby .....	0	3	11.2
Starke .....	0	2	18.6
St. Joseph .....	0	1	.5
Sullivan .....	0	5	17.7
Switzerland ....	0	1	11.8
Tippecanoe .....	1	8	16.4
Union .....	0	1	17.0
Vanderburgh ...	0	9	7.6
Vigo .....	0	5	5.0
Warren .....	1	2	21.8
Warrick .....	2	3	16.4
Wayne .....	1	6	10.6
Wells .....	0	1	5.4

DEATH NOTICES

E. E. HEATH, M. D., of Advance, died January second, aged fifty-three years. Dr. Heath graduated from the Physio-Medical College, Cincinnati, in 1910.

A. H. SEARS, M. D., of Anderson, died December eighteenth, aged eighty-three years. Dr. Sears graduated from the General Medical College, Chicago, in 1878.

WILBUR ROBINSON, M. D., of Sunman, died January sixth, aged fifty-eight years. Dr. Robinson graduated from the Medical College of Ohio, Cincinnati, in 1906.

J. D. TICHENOR, M. D., of Sims, died December twenty-third, aged seventy-three years. Dr. Tich-

enor graduated from the University of Louisville School of Medicine, Kentucky, in 1893.

CHARLES VICTOR HARBAUGH, M. D., of Lapaz, died December ninth, aged seventy-two years. Dr. Harbaugh graduated from the University of Maryland School of Medicine, Baltimore, in 1889.

J. C. KIRKPATRICK, M. D., of Roll, died January second, aged sixty-six years. Dr. Kirkpatrick graduated from the Indiana Medical College, School of Medicine of Purdue University, in 1907.

CHARLES ROBERT LONG, M. D., Pierceton, died November 23, 1933, of cerebral hemorrhage and injuries received in an automobile accident. Dr. Long graduated from the Detroit Medical College, Detroit, 1880. He was eighty-two years of age.

GUY WILLIAM RUBUSH, M. D., of Indianapolis, died January sixteenth, aged fifty-three years. Dr. Rubush was a member of the Indianapolis Medical Society, of the Indiana State Medical Association and the American Medical Association. He graduated from the Indiana University School of Medicine, in 1913.

DANIEL B. CAIN, M. D., of Evansville, died December twenty-fourth. Dr. Cain was seventy years of age. He was a member of the Vanderburgh County Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from the Kentucky School of Medicine, Louisville, in 1893.

IRVING C. BARNES, M. D., of Indianapolis, died January eighth, aged forty-nine years. Dr. Barnes was a member of the Indianapolis Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from the Indiana Medical College, School of Medicine of Purdue University, in 1906.

CHARLES C. DRISCOLL, M. D., of Lafayette, died December eighteenth in an Indianapolis hospital. Dr. Driscoll had practiced medicine in Lafayette since 1893. He was a member of the Tippecanoe County Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from the Kentucky School of Medicine, Louisville, in 1893.

H. M. THIEBAUD, M. D., Vevay, died December eighteenth, after an illness of several months' duration. Dr. Thiebaud was secretary of the Switzerland County Medical Society at the time of his death. He was a member of the Indiana State Medical Association and the American Medical Association. He graduated from the University of Louisville School of Medicine in 1895.





## HOOSIER NOTES

DR. B. G. KEENEY, of Shelbyville, has been appointed health commissioner for Shelby County.

DR. NOAH A. ROCKEY, of Fort Wayne, has been appointed health commissioner for Allen County.

A SYMPOSIUM on "Pneumonia" was presented at the January second meeting of the Fort Wayne Medical Society.

At a recent meeting of the Clinical Orthopedic Society held in Rochester, Minnesota, Dr. E. B. Mumford, of Indianapolis, was elected president.

THE Wabash County Medical Society met at North Manchester, January third, with twenty-one members present. A paper on "Thyroid Disease" was presented.

MEMBERS of the Fountain-Warren County Medical Society met at Veedersburg, January fourth. A discussion of diphtheria and smallpox immunization work formed the program.

MEMBERS of the Decatur County Medical Society met in Greensburg, December twentieth. Dr. P. C. Bentle, of Greensburg, discussed "Upper Respiratory Infections."

1934 OFFICERS for the Carroll County Medical Society are Dr. W. G. Pippinger, president; Dr. J. R. McLaughlin, vice-president, and Dr. E. H. Brubaker, secretary-treasurer.

DR. JAMES O. BEAVIS, of Dayton, Ohio, discussed "Hare Lip and Palate" before members of the Wayne-Union County Medical Society at Richmond, January eleventh.

THE Jay County Medical Society met in Portland, January fifth. A paper on "Better Obstetrics" was presented by Dr. David L. Smith, of Indianapolis.

DR. ARTHUR M. MENDENHALL, of Indianapolis, has been elected secretary for the American Association of Obstetricians, Gynecologists and Abdominal Surgeons.

DR. C. A. DRESCH, of Mishawaka, has retired from active practice. Dr. and Mrs. Dresch and family will make their home in their residence at Diamond Lake, Michigan.

THE Delaware-Blackford County Medical Society met at the Hotel Roberts, Muncie, January sixteenth, for a dinner meeting and for a discussion of society activities for the year.

At the January sixteenth meeting of the Indianapolis Medical Society Dr. Richard H. Miller, of Harvard University School of Medicine, presented a paper on "Ulcer and Cancer of the Stomach."

MISS MARGUERITE PRESTON, Knoxville, Tennessee, and Dr. Charles W. Myers, superintendent of the Indianapolis City Hospital, were married November twenty-eighth in Knoxville.

THE Adams County Medical Society met in the Memorial Hospital, Decatur, January twelfth. Dr. Thurman B. Rice, of Indianapolis, discussed public health work.

MEMBERS of the Hamilton County Medical Society met at Noblesville, January ninth, to discuss plans for the diphtheria immunization campaign in that county.

THE Floyd County Medical Society met in New Albany, January eighth. A paper on "The Use of Insulin in Non-Diabetic Patients" was presented by Dr. Harry Voyles, of New Albany.

THE Vanderburgh County Medical Society met at the Deaconess Hospital, Evansville, January ninth, with an attendance of fifty. Dr. F. E. Simpson, of Chicago, discussed "Radium Therapy."

THE Decatur County Medical Society met at Greensburg, January seventeenth. Immunization work was discussed and case reports were presented.

THE Monroe County Medical Society met at Bloomington, January eighteenth, with ten members present. A paper was read on "Gastro-Intestinal Diseases in Children."

THE LaPorte County Medical Society met in Michigan City, December twenty-first, with Dr. Harry E. Mock, of Chicago, as the principal speaker. His subject was "The Multiple Injury Case."

At the December twenty-first meeting of the Noble County Medical Society, a special meeting held at Kendallville, the diphtheria immunization campaign was discussed and a committee appointed to manage publicity.

A MEDICO-LEGAL symposium by Mr. Alfred E. Evans and Mr. Albert Stump formed the program for the Indianapolis Medical Society at its regu-

lar meeting, January ninth. The meeting was conducted in the manner of an open forum.

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MEMBERS of the Montgomery County Medical Society elected Dr. George Collett, Crawfordsville, president for 1934; Dr. James Noblett, Waveland, vice-president; and Dr. Robert Smith, Crawfordsville, secretary-treasurer.

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MISS GENEVIEVE PICKRELL, of Indianapolis, and Dr. Phillip B. Reed, of Indianapolis, were married January second. Dr. and Mrs. Reed have gone to Rochester, Minnesota, where Dr. Reed will work in the Mayo Clinic.

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At the annual business meeting of the Randolph County Medical Society Dr. Wayne Harmon, Modoc, was made president; Dr. W. S. Dininger, of Winchester, vice-president, and Dr. Lowell Painter, Winchester, secretary-treasurer.

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MEMBERS of the Posey County Medical Society met at the Tavern Inn, New Harmony, January eleventh, with eleven members present. Dr. K. T. Meyer, of Evansville, presented a paper on "X-ray and the General Practitioner."

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OFFICERS for the Putnam County Medical Society were elected at the January ninth meeting, held in Greencastle. Dr. L. W. Veach, of Bainbridge, was made president and Dr. G. D. Rhea, of Greencastle, was elected secretary-treasurer.

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THIRTY-FIVE members of the Madison County Medical Society attended the January fifteenth meeting at St. John's Hospital in Anderson. A paper on "Fractures" was the principal address of the evening.

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At the December eighth meeting of the Floyd County Medical Society officers for 1934 were elected as follows: President, W. F. Edwards, M. D., New Albany; vice-president, P. M. Davis, M. D., New Albany, and secretary-treasurer, P. H. Schoen, M. D., New Albany.

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At the December twenty-first meeting of the Northeastern Indiana Academy of Medicine, held in Kendallville, Dr. S. Milton Goldhammer, of Ann Arbor, presented a paper on "Some Few Points of History, Modern Developments, and Treatment of Pernicious Anemia."

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OFFICERS of the Delaware-Blackford County Medical Society for 1934 are Dr. C. L. Bock, Muncie, president; Dr. H. E. Hill, Muncie, president-elect; Dr. A. C. Rettig, Muncie, secretary-treasurer. Dr. T. R. Owens, retiring secretary, has completed his eighth year as secretary for this organization.

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THE Shelby County Medical Society met at the Alcazar, Shelbyville, January third, with twenty-one in attendance, for a business meeting. A discussion of medical care of the indigent formed the program, and the plan of the state relief director, Mr. William Book, was accepted by the society.

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VIGO COUNTY MEDICAL SOCIETY has started the new year with a county society bulletin, carrying the society's program of meetings for January, a list of committees, a message from the president, editorial notes, and items of news. M. C. Topping, M. D., of Terre Haute, is the editor of the bulletin.

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"THE New Deal in Public Health" was the subject presented by Dr. Thurman B. Rice, of the Indiana Division of Public Health, before members of the Gibson County Medical Society at Princeton, January tenth. Dr. Rice explained the real aim and intent of the present organization.

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THE Daviess-Martin County Medical Society met at Washington, December twenty-sixth, for election of officers. For 1934 the president will be Dr. Thomas Hays, Burns City; vice-president, Dr. W. O. McKittrick, Washington, and secretary-treasurer, Dr. E. B. Smoot, Washington.

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OFFICERS for the Miami County Medical Society were elected at the meeting held in Peru, December twenty-ninth. Dr. E. L. Waite, of Gilead, was made president; Dr. C. R. Herd, of Peru, vice-president, and Dr. E. H. Andrews, Peru, secretary-treasurer.

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AUXILIARY members served supper to the members of the Orange County Medical Society at its annual business meeting, December fifth. Officers and committees for 1933 were re-elected for 1934. The diphtheria immunization campaign was discussed and plans made for it.

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MEMBERS of the Tippecanoe County Medical Society held a meeting at the State Soldiers' Home, Lafayette, January eleventh, with an attendance of seventy-five. Subjects discussed were "Colds and Their Complications in Children" and "Amebic Dysentery."

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MEMBERS of the Greene County Medical Society met at Linton, January eleventh, for election of officers. Dr. Carl M. Porter, of Jasonville, was made president; Dr. William F. Craft, Linton, vice-president; Dr. M. S. Mount, Bloomfield, secretary-treasurer.

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NEW officers for the Northeastern Indiana Academy of Medicine were elected at the December meeting. The new president is Dr. W. O. Hildebrand, of Topeka; vice-president, Dr. W. W. Swarts, of Auburn; and secretary-treasurer (re-elected), Dr. F. Black, of Ligonier.

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AT a dinner meeting of the Whitley County Medical Society held in Columbia City, December twelfth, Dr. Ernest H. Hershey, of Churubusco, was made president; Dr. Paul Garber, South Whitley, vice-president; and Dr. O. F. Lehmberg, Columbia City, secretary-treasurer.

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THE Fayette-Franklin County Medical Society met at the McFarlan Hotel, Connersville, January ninth, with an attendance of seventeen. A discussion of "Appendicitis" and the presentation of a series of x-ray pictures showing the result of operation on the chest, comprised the scientific program.

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AT the January third meeting of the Sullivan County Medical Society officers for 1934 were installed. Dr. J. J. Parker is president, Dr. J. S. Brown, vice-president, and Dr. M. H. Bedwell, secretary-treasurer. A film demonstration of "Care of Fractures of the Femur by Skeletal Traction" was presented.

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MEMBERS of the Hancock County Medical Society met at Greenfield, January fifteenth. Dr. J. E. Ferrell presented a paper on "Purpura." The immunization campaign program was discussed, as was also the present status of federal work in the county. Dentists were invited to attend the meeting.

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DR. JON N. KELLY, LaPorte, was made president of the LaPorte County Medical Society at the dinner meeting of the group held in Michigan City, December twenty-first. Dr. L. E. Stephenson, Michigan City, was made vice-president and Dr. E. E. Linn, LaPorte, was re-elected secretary-treasurer.

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THE *Annals of Surgery* is this year celebrating its fiftieth anniversary. It has been guided continuously by Dr. Lewis Stephen Pilcher, who originated the *Annals* in 1885 and has continued as editor to the present time. The magazine is the

official organ of the American Surgical Association, the New York Surgical Society, and the Philadelphia Academy of Surgery.

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MEMBERS of the Grant County Medical Society met at the Spencer Hotel in Marion, December twenty-seventh, with an attendance of sixty-three. This was a ladies' night party with thirty-three guests present. Officers for 1934 were elected: Neal M. Loomis, president; Dr. R. W. Lavengood, vice-president; Dr. E. F. Jones, secretary-treasurer (re-elected).

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THE fiftieth annual convention of the Mid-South Post Graduate Medical Assembly will be held at the Hotel Peabody, Memphis, February thirteenth to sixteenth, inclusive. Complete programs may be obtained by addressing Mrs. Percy Finlay, Publicity Department, Mid-South Post Graduate Medical Assembly, Memphis, Tennessee.

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THE Perry County Medical Society met at Tell City, January eleventh, with a committee from the Forty and Eight to discuss the diphtheria immunization campaign. Officers for 1934 were elected: President, Dr. Hargis Bush, Cannelton; vice-president, Dr. J. E. Taylor, Leopold; secretary-treasurer, Dr. D. S. Conner, Cannelton.

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THE Southeastern Surgical Congress will hold its fifth annual assembly in Nashville, Tennessee, March fifth to seventh. The Andrew Jackson Hotel will be hotel headquarters; lectures and exhibits will be presented in the War Memorial Building. Information concerning the program may be obtained by writing to Dr. B. T. Beasley, 1019 Doctors Building, Atlanta, Georgia.

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THE Randolph County Medical Society held a meeting at the Randolph County Hospital, Winchester, January eighth. Officers for this society were elected at the December fourth meeting, when Dr. Wayne Harmon, of Modoc, was made president; Dr. W. S. Dininger, of Winchester, vice-president; and Dr. L. W. Painter, Winchester, secretary-treasurer.

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MEMBERS of the Porter County Medical Society met at the Lembke Hotel, Valparaiso, January ninth, with twenty members present, for election of officers. F. L. Kleinman, M. D., of Hebron, was made president; E. H. Miller, M. D., Valparaiso, vice-president, and J. C. Brown, M. D., Valparaiso, secretary-treasurer. Plans for the diphtheria immunization campaign in Porter County were completed.

THE Knox County Medical Society met January ninth in Vincennes for a business meeting. Drs. E. L. Mock, of Bicknell, and G. H. Springstun, of Oaktown, were voted upon and accepted as members of the society. Drs. Gilmore, Curtner, Richards, and McCoy entertained the members with two vocal selections. Dr. H. C. Wadsworth and Dr. Ramsey were speakers on the program. The secretary reported twenty-seven paid members out of a membership of thirty.

DR. C. A. TINDALL, of Shelbyville, was elected president of the Shelby County Medical Society at its meeting held December thirteenth in Shelbyville. Dr. V. C. Patten, of Morristown, is the new vice-president and Dr. R. W. Gehres, Shelbyville, is secretary-treasurer. During the past year the society held eighty-four free clinics, attending an average of thirty persons at each clinic. All of the members of the society assisted with the work.

A SPECIAL program of lectures and demonstrations in medicine will be held under the direction of the Mayo Foundation from March fifth to ninth, inclusive. Mornings will be devoted to surgery, demonstrations of oxygen therapy and of intravenous therapy, and consideration of postoperative complications. In the afternoons medical subjects, including gastroenterology, dermatology, and syphilis, will be discussed and a symposium on dyspnea will be held. In the evenings clinico-pathologic conferences will be conducted. While the program is arranged primarily for the Fellows of the Foundation visiting physicians are invited to attend.

### INDIANA UNIVERSITY NEWS NOTES

DR. J. E. P. HOLLAND, Indiana University physician, has been appointed by Dr. E. E. Padgett, president of the Indiana State Medical Association, to serve as a member of a committee studying high school athletics in Indiana.

Other members on the committee for 1934 are: W. D. Little, Indianapolis; H. C. Wadsworth, Washington; R. H. Pierson, Spencer; and O. H. Bakemeier, Indianapolis.

Among other functions it is the object of the committee to determine whether the playing of basketball is being over-emphasized in the high schools of Indiana.

THE members of the Indianapolis chapter of the Phi Beta Pi professional medical fraternity at Indiana University recently gave a banquet and

dance in honor of the pledges of the chapter in Bloomington division of the Indiana University Medical School at the Athenaeum Club, Indianapolis.

BEN SPEHEGER, assistant in the anatomy department of the Indiana University Medical School, discussed "The Nature of the Distribution of the Vagi Nerves in the Thorax and Abdomen" at a recent seminar meeting of the anatomy and physiology departments of the Indiana University Medical School.

PROF. ALFRED EVENS of the Indiana University Law School spoke January ninth before members of the Indiana Medical Society at their monthly meeting in Indianapolis. Prof. Evens spoke on "Indiana Workman's Compensation Law."

ARRANGEMENTS have been completed for the children of the free kindergarten in Indianapolis to receive dental service at the clinics of the new Indiana University Dental School building at the medical center on West Michigan Street, according to the announcement this month of Dean F. R. Henshaw.

Due to the fact that the city clinics have been discontinued, these children were without dental service until the Indiana University School of Dentistry offered to furnish the service at its own general clinic.

The new Indiana University dental clinic will provide service during the present school year for nearly 8,000 patients, according to present estimates. Last year the dental clinic served 7,740 patients in its old location on North Pennsylvania Street. The new service for children of the Indianapolis free kindergarten will reach approximately 500 children during the school year, according to estimates of Dr. G. D. Timmons, secretary of the dental school faculty.

CHANGES in the teaching staff of the Indiana University School of Dentistry have been announced by Dean F. R. Henshaw. Dr. W. S. Zarick has been appointed instructor in the anatomical laboratory course. Dr. J. K. Berman is serving on the staff in place of Dr. E. Vernon Hahn, professor of surgery, who is on leave of absence.

A CHILD feeding test now in progress among 60 children of the Rotary convalescent unit in connection with the James Whitcomb Riley Hospital and the Indiana University medical center at Indian-



apolis will determine whether or not the child, if left alone, will eat what it should. The test is being carried on under auspices of the Indiana University dietary department and the research committee of the Indiana University Medical School and hospitals.

One theory is that biological needs, if left to themselves, will dictate the choice of proper foods. In order to test the theory, child convalescents in the Rotary unit will be given a chance to choose from a wide variety of foods placed before them. The food will be served cafeteria style and each child will be allowed to help himself to whatever he chooses. Standard measures will be used and quantities checked. Any left-overs also will be checked after the children finish their meals, so that the actual consumption of food by each child may be carefully measured for each meal.

The diet experiment is being supervised by Miss Lute M. Troutt, chief dietitian and assistant professor of home economics, and Dr. Mabel T. Wellman, head of the home economics department of the university at Bloomington. Miss Virginia Speicher, therapeutic dietitian, is in direct charge. The dietary department, in a recent report from Miss Mary de Garmo Bryan, inspector of the American Dietetic Association, is characterized as "one of the strongest in the country."

The child feeding test started December eighth and will close at the end of four months. The first month is being given over to observation of the children on the present basis of a more or less prescribed diet. On January eighth, the children began helping themselves. If any child shows evidence of over-eating or under-eating or improper unbalancing of diet to the extent that it seriously affects his health, he will be taken off of the free list. A similar experiment, however, under Dr. Clara Davis at the University of Chicago, has given some indication that a child, if left alone, will do a pretty good job in choosing his own diet.

DENTISTS from many parts of Indiana gathered in Indianapolis Monday, January eighth, for the dedication of the new \$250,000 Indiana University Dental School building on the grounds of the medical center, West Michigan Street, Indianapolis. The day's program consisted of a series of clinics in the laboratories of the new building. The evening program was held at seven o'clock at the Indianapolis Athletic Club. The dedicatory address was given by Dr. C. N. Johnson of Indianapolis.

The clinic demonstrations during the day were under auspices of the Indianapolis Dental Society of which Dr. G. T. Timmons, secretary of the dental school faculty, is president. The evening meeting was under the sponsorship of the Alumni Association of the Dental School. Dr. Frank A.

Hamilton, Indianapolis, is president of the association.

The new dental school building was started November 29, 1932, and the cornerstone was laid May 16, 1933. The dental school moved into the new building from its former home on North Pennsylvania Street at the opening of the school semester in September.

Incorporating the best features of the leading dental schools throughout the United States and Canada, the new building is thoroughly modern and provides long sought facilities for dental education in Indiana. Robert Frost Daggett, Indianapolis, was the architect.

The structure is 220 feet long by 65 feet deep and built of variegated Indiana limestone. It is three stories in height. The third floor houses an eighty-chair clinic where students are provided laboratory experience in all types of cases. More than 7,000 patients will be treated during the year including various types of cases from the Riley Hospital for children and the other two state hospitals at the medical center. It is the sixth oldest dental school in America and has been rated Class A by the American Dental Association since the merger of the former Indiana Dental College as that of Indiana University in 1925.

## SOCIETIES AND INSTITUTIONS

### INDIANA STATE MEDICAL ASSOCIATION

#### THE COUNCIL

The annual midwinter meeting of the Council of the Indiana State Medical Association was called to order by Dr. O. O. Alexander, of Terre Haute, chairman, at 11:10 a. m., Sunday, January 14, 1934, in parlor A, fifth floor, of the Indianapolis Athletic Club, Indianapolis. Roll call showed 100 per cent attendance, as follows:

#### Members of the Council:

- 1st District—John H. Hare, Evansville
- 2nd District—H. C. Wadsworth, Washington
- 3rd District—H. C. Ragsdale, Bedford
- 4th District—H. P. Graessle, Seymour
- 5th District—O. O. Alexander, Terre Haute
- 6th District—Samuel Kennedy, Shelbyville
- 7th District—L. A. Ensminger, Indianapolis
- 8th District—M. A. Austin, Anderson
- 9th District—F. T. Romberger, Lafayette
- 10th District—E. M. Shanklin, Hammond
- 11th District—George D. Miller, Logansport
- 12th District—E. M. VanBuskirk, Fort Wayne
- 13th District—W. B. Christophel, Mishawaka

#### Officers:

- J. H. Weinstein, president, 1933
- E. E. Padgett, president, 1934
- W. J. Leach, president-elect
- A. F. Weyerbacher, treasurer
- T. A. Hendricks, executive secretary

As there were no corrections in the minutes of the Council meetings held during the annual session at French Lick in September, the reading of these minutes was dispensed with.

Each councilor turned in a report blank giving the names of his district officers and the time and place of the next meet-

ing of his district society. (This information is printed on the officers' page in THE JOURNAL.)

Each councillor had been given a form to fill out giving the societies in his district which receive F. E. R. A. funds for the care of the indigent sick and listing each society which is putting on an immunization campaign. These blanks were checked and returned at this meeting.

#### REPORTS OF COUNCILORS BY DISTRICTS

*First District*—Hare. Nothing special to report.

*Second District*—Wadsworth. Dr. Wadsworth reported the revival of the Knox County Medical Society. "Knox County bids fair to step back among the leading societies in Indiana."

*Third District*—Ragsdale. Dr. Ragsdale reported some difficulties in a few counties in regard to the diphtheria immunization campaign. "It may be a little rocky for the next year or so, but the men are thinking for themselves, and I think we are going to teach you something down there." Dr. Ragsdale presented a letter of criticism from the secretary of the Washington County Medical Society, which letter, along with an answer from the headquarters office, was read before the Council. Dr. Ragsdale said that the criticism expressed in the letter was "the attitude of every society in the district."

In answer to the criticism voiced by Dr. Ragsdale, Dr. Weinstein made a detailed statement of the purposes, ideals, endeavors and program of the State Association. Several important features of Dr. Weinstein's talk follow:

"I am not rising to defend the actions of the Executive Committee or any of the officers. I don't believe they need any defense whatever. There are many things, of course, that the rank and file of the physicians around the state do not perceive, and hence do not fully understand. They do not know the things that the officers have been up against. . . . All the doctors have felt the depression sorely. After a great deal of thought and discussion the plan was evolved whereby it would be possible for the physician to receive some of the moneys that were being expended for poor relief. When it comes from municipal or federal sources we must admit that there is some little hint that it might be state medicine. . . . They must take into consideration that it is the best and fairest plan that can be made. If we had allowed the old plan to continue, the howl would have been ten times worse than it has been, because the local money, the federal money, was being spent and the physicians were getting nothing and doing much more work than ever for charity. If a local county society does not care to enter into this, well and good; let it go ahead and fight the thing out on the old plan.

"In regard to our program of child welfare, we did start out with the absolute, confirmed contention of doing nothing but educational work and had our hands not been forced we would have stuck to it. Again it was a case of compromise, and the compromise we were able to make, I think, deserves a great deal of credit. Had we not made the compromise the federal government absolutely had plans to step in and do the work. We owe Dr. Harvey a great debt. Dr. Harvey sent one of the most diplomatic and yet firm words to Grace Abbott that I think could be accredited to anybody in such a position. We had our plans here and we were one jump ahead of the hounds; so, being one jump ahead, we cut out all of this federal work which was going to be done on malnutrition, etc., and we haven't been bothered since. So we were forced into doing some of the things that we are doing. I think that about two-thirds of the counties in the state have co-operated. . . . If we can keep that up we will not be bothered by the federal government stepping in. And if we are able to continue with such men as Dr. Harvey and Dr. Rice in the places where they are we can be sure that the doctors in the state are going to be protected to the best of their ability.

"In regard to C. W. A., I feel that the fight has been made and won by your State Association. The Indiana State Medical Association gets nation-wide credit for what it did in that movement in the A. M. A. *Journal* of two weeks ago. We jumped in without any advice and objected strenuously. With Dr. Woodward, the American Medical Association representative, in Washington for weeks and with what work we did

here, a change in the ruling was made. The first ruling was that only the four thousand physicians in the employment of the government were to take care of the C. W. A. workers. . . . In the A. M. A. *Journal* of January 13 you will find an editorial with a letter from Mr. Hopkins which clarifies the entire matter. At the present time we have not got the thing to the point where any physician may be employed, but they do direct the local administrator to get in touch with your local county medical society and have the local county medical society prepare a list of men—it may include your entire society—who are competent to take care of injuries and compensable diseases and also to ask for a list of men who are qualified to handle special cases. And so if the medical society considers every one of its members to be thoroughly competent, there is no reason why every member should not be named. It also goes on to say that competent men who for other than professional reasons are not members of their societies shall not be excluded. . . .

"Although, as you say, every society in your district feels the same way, I think you and the members of your societies will have to admit that the Executive Committee and your officers are not riding toward the precipice of state medicine—we are fighting. I do hope that with our new administration coming in, and with the burdens it is going to have to carry, you will stand back of Dr. Padgett and your Executive Committee with the same loyalty which you gave me during my year of office."

*Fourth District*—Graessle. Dr. Graessle reported that a new district society president would have to be elected, as the present president had resigned to take up other work outside of the state.

*Fifth District*—Alexander. "We have in our district three of the societies that have an agreement with the F. E. R. A. with which they are satisfied. Two of them, Vigo and Vermillion, so far have been unable to perfect an agreement. Four of our counties either have or are carrying on the diphtheria immunization campaign. The other has been trying to arrange to carry it on, but so far it has been unable to obtain the immunizing material."

*Sixth District*—Kennedy. "All eight counties have undertaken immunization campaigns. Shelby County is the only county in the district which has made arrangements to receive F. E. R. A. funds."

*Seventh District*—Ensminger. Dr. Ensminger reported upon the annual district meeting and requested suggestions as to how to get physicians to attend scientific programs. The dinner part of the program had a good attendance, but the afternoon scientific session was not so well attended. Marion County has undertaken the immunization campaign, and other counties in the district are either going to or are conducting such campaigns.

*Eighth District*—Austin. "Delaware-Blackford Society has made a complete report upon the immunization work and F. E. R. A. arrangements under which it is receiving federal funds for the care of the indigent sick. C. W. A. medical services are being supplied by any reputable physician in Anderson, but ten physicians are doing the indigent sick work under the direction of the township officials in Anderson. Total medical bill for December for the ten men was \$316.44, a decrease because of the transfer of men from relief rolls to C. W. A. work. The township trustee stated that this method was being employed, as he is to give medical services for the least expenditure.

"This year's district meeting was one of the most successful ever held. There had been no district meeting since 1924. One hundred and fifty attended the meeting, which was along post-graduate pediatric lines. District functioning well, but I can get no replies from letters to Randolph County."

*Ninth District*—Romberger. "Most active year in the history of the district. Every county visited. Immunization campaign practically completed. One township in Warren County has 99 per cent of its school children immunized. In regard to the C. W. A. and township business, our whole district is fairly well satisfied. Charges are being filed in one county of the district against a man upon the grounds of unethical publicity."



*Tenth District—Shanklin.* "Everything going along very nicely with the assistance of the Indianapolis headquarters. Immunization program is being carried out in Lake County on about as efficient a basis as can possibly be done. We had an influx of C. W. A. nurses, but we had plans as to how to use them before they came into the county. Lake County, for the first time during the economic depression, shows a net increase of eight members."

Dr. Shanklin made fine reports as to the activities during the past year in Porter, Jasper, and Newton counties. He explained the situation in Lake County where there is a society within a society; that is, the Calumet Township Medical Society is composed of men who are members of the Lake County Medical Society and who reside in Calumet Township.

All should be on the lookout for two women who are putting on baby clinics and contests in various parts of the state in behalf of the American Legion. If these clinics are financially successful the American Legion makes \$50.00 and the women make over \$1,000.00. The Lake County Medical Society passed a resolution in 1932 that no member should connect himself in any manner with any clinic or anything that involved the free services of the profession without that project being OK'd by the society.

*Eleventh District—Miller.* "The Eleventh District Medical Society is the best society in the State," the councilor reported. "All counties in the district are carrying on the immunization campaign. One hundred and five registered for the district meeting, 300 for the banquet."

*Twelfth District—Van Buskirk.* "Everything seems to be going well in the district, with the exception of Allen County, which is working on a contract for handling indigent sick work under F. E. R. A. regulations. However, it looks as if this difficulty will be ironed out shortly. In order to correct any misunderstanding concerning the immunization campaign, a meeting was held in Fort Wayne to which were invited all health officers and all the officers and members of the public health committees of the county medical societies in the districts. Dr. Jackson of the State Board of Health explained the entire campaign.

"Postgraduate pediatric courses are planned for the district."

*Thirteenth District—Christophel.* "District meeting held in South Bend in October was successful in every respect. Reorganization of Starke County being considered. Troubles in South Bend with the indigent sick problem."

Dr. F. S. Crockett suggested that one thing which had not been stressed in the discussion concerning arrangements for the care of the indigent sick is the necessity for each local county medical society making friends with the local administrator. A committee should call upon the administrator and go into detail with him, giving him the viewpoint of the profession in this matter.

The Council recessed for luncheon in parlor E, fifth floor of the club, at 1:00 o'clock.

REPORT OF OFFICERS

Dr. J. H. Weinstein, the retiring president, expressed his appreciation for the help and co-operation he had received from the members of the Council, the Executive Committee, all committeemen, and the membership in toto. "This has been a strenuous year for the entire society. Many serious problems have come before us and we have many serious problems before us yet. Just what the end results will be none of us know, but I am sure that you can carry back to your district this—that the officers and the Executive Committee are striving in every way possible to protect the medical profession."

Dr. Weinstein spoke of the changes in the contract of the Medical Protective Company.

Dr. E. E. Padgett, president, 1934: "Medical economics is the most important subject we have before us at the present time as a medical organization." Dr. Padgett spoke of the reorganization of the State Board of Health, which placed the burden of public health education upon the medical profession, and the success of the immunization campaign, saying that the

public wants it, and if the medical profession does not give it to them they will get it somewhere else. He then spoke of the Federal Emergency Relief Act which made funds available under certain circumstances for the treatment of the indigent sick and through which many physicians have been paid for their services, who otherwise would not have received money for their services. "The Indiana State Medical Association has taken its place well in the front in anticipating and dealing with these changes."

Dr. Padgett regretted the fact that Indiana men are not invited more frequently to speak on scientific matters outside of Indiana. "We invite many outstate men to address our local county medical societies, but in turn these outstate societies do not call upon Indiana men as often as they should be called upon."

Dr. W. J. Leach, president-elect: After expressing his appreciation to the Association for his election for president and pledging his best efforts to the Association, Dr. Leach said: "These problems that are confronting us are developing the medical profession in the public mind as has never been done before. The American medical profession has become more a part of American society than ever before."

Dr. A. F. Weyerbacher, treasurer, presented the following report:

January 11, 1934.

Indiana State Medical Association,  
1021 Hume Mansur Building,  
Indianapolis, Indiana.

Dear Sirs:

We have audited your records of cash receipts and disbursements for the five months ended December 31, 1933, and the records of cash receipts and disbursements of THE JOURNAL of the Indiana State Medical Association for the year ended that date and submit the following exhibits, without certificate:

*Exhibit A*—Indiana State Medical Association—Summary of General Cash Receipts and Disbursements for the years ended December 31, 1933 and 1932, and comparison.

*Exhibit B*—The Journal of the Indiana State Medical Association—Summary of cash receipts and disbursements for the year ended December 31, 1933.

Exhibit A includes amounts as audited by us only for the five months ended December 31, 1933. The amounts set forth for the year ended December 31, 1932, and included for the seven months ended July 31, 1933, with respect to Indiana Medical Association, have been taken from reports of other accountants.

The cash balances at December 31, 1933, were verified by us, and consisted of the following:

Indiana State Medical Association:	
Cash on deposit—Indiana National Bank..	\$5,964.89
Less 1934 dues deposited but not considered receipts until January, 1934....	3,339.00
Cash on deposit—Bankers Trust Company	200.00
Total.....	\$2,825.89

THE JOURNAL of the Indiana State Medical Association—Cash on deposit, Fletcher Trust Company...\$ 71.94

In addition to the foregoing, the Association inaugurated during the year a Medical Defense Fund, allocating thereto a portion of all dues received. This fund is deposited with the American National Bank and at December 31, 1933, as verified by us, amounted to \$217.30.

The net worth of the Association at December 31, 1933, includes, in addition to the foregoing cash balances, the following bonds which were examined by us:

	Face Value
United States Liberty Loan, 4¼%—1933-38.....	\$ 3,000.00
United States Treasury, 4¼%-3¼%—1943-45.....	2,000.00
Indianapolis, Indiana, City Hospital, 4¾%—1941...	1,000.00
Indianapolis, Indiana, City Hospital, 4%—1950.....	1,000.00
Indianapolis, Indiana, City Hospital, 4%—1951.....	4,000.00
Ft. Wayne, Indiana, School Improvement, 4½%—1940.....	5,000.00
Lake County, Indiana, State Highway Aid, 5%—1937	2,000.00

Marion County, Indiana, Flood Prevention, 4¼%— 1949.....	5,000.00
Beachton Court Apartments, Chicago, Illinois, 6%— 1938, certificates of deposit dated August 8, 1931..	4,000.00
Rokeyb Apartment Hotel, Chicago, Illinois, 6%— 1937, certificates of deposit dated January 13, 1932.....	1,000.00
Total.....	\$28,000.00

The latter two issues of securities are in default of interest. Receipts of interest on the other bonds are set forth in Exhibit A.

Membership dues were collected during the year as follows:

2680 Regular members, 1933 dues .....	\$18,760.00
10 Regular members, 1932 dues .....	70.00
10 Honorary members, 1933 dues .....	20.00
Total.....	\$18,850.00

We note that the printed dues statements request remittances to be mailed to Mr. Thomas A. Hendricks, Executive Secretary, and that numerous checks received are made payable to him. In order to strengthen the control over collections we suggest that the dues statements be reprinted to request remittances to "Indiana State Medical Association."

Yours truly,  
HASKINS & SELLS

EXHIBIT A

INDIANA STATE MEDICAL ASSOCIATION

SUMMARY OF GENERAL CASH RECEIPTS AND DISBURSEMENTS  
FOR THE YEARS ENDED DECEMBER 31, 1933 AND  
1932, AND COMPARISON

	Year ended December 31, Increase or		
	1933	1932	Decrease
Balance, Beginning of Year \$	1,556.00	\$ 1,887.18	—\$330.81
<b>Cash Receipts:</b>			
Membership dues .....	\$18,850.00	\$19,040.00	—\$190.00
Postgraduate study .....	86.00	427.50	—341.50
Income from exhibits.....	870.00	1,122.50	—252.50
Interest on bank balances	37.62	113.48	—75.86
Interest on United States government bonds ....	212.50	212.50	
Interest on Indianapolis, Indiana, City Hospital bonds .....	247.50	247.30	.20
Interest on Marion Coun- ty, Indiana Flood Pre- vention bonds .....	212.50	212.50	
Interest on Ft. Wayne, Indiana, School Im- provement bonds .....	225.00	225.00	
Interest on Lake County, Indiana, State Highway Aid bonds .....	50.00	100.00	—50.00
Indiana State Dental As- sociation .....	2.00	12.00	—10.00
Refund by Journal of the Indiana State Medical Association of 1932 ad- vance .....	32.52		32.52
Total cash receipts...	\$20,825.64	\$21,712.78	—\$887.14
Total .....	\$22,382.01	\$23,599.96	—\$1,217.95

Cash Disbursements:

Journal of the Indiana State Medical Associa- tion:			
Transfer of applicable portion of dues.....	\$5,406.00	\$5,716.25	—\$310.25
Loan .....	500.00		500.00
Transfer to Medical De- fense fund .....	217.30		217.30
Executive office expenses	8,094.66	10,971.87	—2,877.21
Publicity committee ....	395.98	370.66	25.32
Public policy .....	399.76	100.56	299.20

Council .....	160.98	295.75	—134.77
Treasurer's office .....	205.68	150.00	55.68
Annual session .....	1,382.90	1,493.53	—110.63
Miscellaneous committees	525.54	384.18	141.36
Attorney fees .....	600.00	600.00	
Medical defense expendi- tures (prior to creation of special fund) .....	1,475.00	1,715.00	—240.00
Postgraduate study .....	192.32	245.79	—53.47
Total cash disburse- ments .....	\$19,556.12	\$22,043.59	—\$2,487.47
Balance, end of year	\$2,825.89	\$1,556.37	\$1,269.52

Note: The above statement includes amounts as audited by us only for the five months ended December 31, 1933. The amounts set forth for the year ended December 31, 1932, and the amounts included for the seven months ended July 31, 1933, have been taken from reports of other accountants.

EXHIBIT B

THE JOURNAL OF THE INDIANA STATE MEDICAL  
ASSOCIATION

SUMMARY OF CASH RECEIPTS AND DISBURSEMENTS FOR THE YEAR  
ENDED DECEMBER 31, 1933

Receipts .....	\$12,502.98
Disbursements .....	12,431.04
Balance, December 31, 1933.....	\$ 71.94

Dr. E. M. Shanklin, editor of THE JOURNAL: Dr. Shanklin spoke of the letters that had been received which were complimentary to THE JOURNAL. He also spoke of the criticisms. "The smartest thing that this Association could have done was to surround the editor with an editorial board." He paid a tribute to Miss Hope Toman, assistant to the editor, who has had thirteen years' experience in publishing the Indiana State Medical Association JOURNAL.

Dr. F. S. Crockett then spoke as a member of the Legislative Committee of the American Medical Association upon the subject of veterans' hospitalization. He said that the medical profession as an organization could agree with everything in the four-point program of the American Legion except a part of point No. 2 concerning the interpretation of the words, "able to reasonably pay" for medical treatment. The Legion has canvassed every congressman and senator to solicit his aid in passing this four-point program, and three weeks before Congress convened it looked as if the Legion would get everything for which it asked. It now appears that there is some doubt in regard to this. The President in his budget even called for a little less than was spent in 1933.

Dr. Crockett spoke of the work of Dr. W. C. Woodward, of the American Medical Association, in Washington, which is more of a legal nature, while the work of the Legislative Committee of the American Medical Association is of a legislative or political nature. . . . As a matter of fact, there are only about fourteen states organized in any way comparable to Indiana, and Indiana is among the first half dozen.

Dr. Verne K. Harvey, director, State Division of Public Health: "The State Division of Public Health has a three-fold duty to perform: to the administration by giving the most efficient service possible, to the public by protecting the public health, and to the doctors through an understanding relationship with the organized medical profession. We have tried in every way we know how to exercise all three of these. We believe that good public health administration is based upon the very thing that I think we have now, and that is the friendly relationship which exists between the constituted health authorities and the organized medical profession. In order to build anything worthwhile for public health in this state, we must preserve that relationship between the constituted health authorities and the organized medical profession. The State Division of Public Health has launched upon a program covering the following five points: First, cleaning up streams and natural water courses in the state; second, the rural sanitation program in southern Indiana, to cut down typhoid and dysentery rates; third, venereal disease program. Up to about a



year ago the state was spending about \$6,000 in subsidizing the venereal clinics. The state was paying clinicians' salaries. With the new set-up of the State Board of Health this was discontinued, and the state is now completely out of the venereal disease business so far as subsidizing these clinics is concerned. We have been very severely criticized for this. A new plan for the venereal disease work will be submitted within a very short time. Fourth, diphtheria and smallpox immunization campaign. Sixty counties are actively engaged in this campaign. There has been sent out from the State Division of Public Health enough toxoid to immunize approximately sixty thousand children and vaccine enough for forty-one thousand children. Six thousand pieces of literature have been sent to county medical societies. Some sixty thousand consent record blanks have been sent to parents. One of the main objectives is to educate the people that they can get this protection from their family physician. Indiana is the poorest vaccinated state in the North. Fifth, the need of revision of public health laws. Our old health officer law was all right in the horse and buggy days. There are approximately 450 health officers in the state. The State Division of Public Health has nothing whatever to say as to who shall be health officer, and when men are appointed who are objectionable to the health organizations of a community there is nothing the State Division of Public Health can do about it. The rabies law should be revised. Patients should be treated by their local family physicians and the money should stay in the local communities."

Albert Stump, attorney for the Association, answered questions which were presented to him by Dr. Romberger as to rulings that should govern the actions of a county medical society which has no constitution and by-laws.

Dr. William H. Kennedy and Dr. H. H. Wheeler, members of the Executive Committee, also were present at the luncheon.

#### UNFINISHED BUSINESS

1. A formal contract was prepared and signed by Dr. Shanklin, editor of *THE JOURNAL*, and Dr. Alexander, chairman of the Council:

#### AGREEMENT

"THIS AGREEMENT, entered into this first day of December, 1933, by and between INDIANA STATE MEDICAL ASSOCIATION, party of the first part, and DR. E. M. SHANKLIN, party of the second part, witnesseth:

"That the first party by these presents employs the second party, and the second party accepts such employment as editor of *THE JOURNAL* of the Indiana State Medical Association. Said employment is on the following terms and conditions:

"1. The first party will pay to the second party for his services as editor the sum of \$600.00 per year, which payments are to be made in twelve equal monthly installments of \$50.00 each.

"2. *THE JOURNAL* shall be published by a publisher to be selected by the Executive Secretary of the first party with the aid and advice of the Executive Committee of the first party.

"3. The office of *THE JOURNAL* shall be in the headquarters office of the Indiana State Medical Association.

"4. The Executive Secretary of the first party shall be the managing editor of *THE JOURNAL* and shall discharge such duties in the preparation and publication of *THE JOURNAL* as usually pertain to the managing editor of such publications.

"5. Miss Hope Toman, or any other person to be selected and appointed by the Council or the Executive Committee, shall be assistant to the editor and managing editor in the editing and publishing of *THE JOURNAL*, and shall perform such services as usually pertain to that position in the publication of similar journals.

"6. There shall be an Editorial Board of five members, no more than two of whom shall be from any one Councilor District, the members of which Editorial Board shall be appointed by the Council of the first party. This Editorial Board shall pass upon all matters of policy in regard to or involving *THE JOURNAL*, and their determination of ques-

tions of policy shall be final, and the second party, as editor of *THE JOURNAL*, will conform to the policies determined by the Editorial Board.

"7. The editor and the Editorial Board shall review books sent in to *THE JOURNAL* and shall make proper provision that such books shall become permanently a part of the library of the Association.

"8. As editor of *THE JOURNAL*, the second party will have supervision in general of the preparation and assembly of the contents of each issue of *THE JOURNAL* and the matter of opening *THE JOURNAL* to articles and other material appropriate thereto, and of accepting or rejecting articles and material prepared and presented for publication, all of which shall be done under the direction and control of the Editorial Board.

"9. It is understood by the parties hereto that *THE JOURNAL* is to be maintained and developed as the official professional journal of the Indiana State Medical Association, devoted to the interests of the medical profession and the Association, of which it is to be the official organ.

"10. This agreement shall be in full effect from January 1, 1934, to and including December 31, 1934, which shall be the term of employment covered by this contract.

"IN WITNESS WHEREOF, the first party has executed this agreement in duplicate by its properly authorized officers and the second party by his signature on the date above written.

INDIANA STATE MEDICAL ASSOCIATION.

By O. O. ALEXANDER, M. D., First Party.

E. M. SHANKLIN, M. D., Second Party."

Upon the motion of Dr. Romberger, seconded by Drs. Van Buskirk, Ensminger, and Miller, the Council voted an additional \$300.00 to Dr. Shanklin as an honorarium for his services as editor of *THE JOURNAL*.

2. William B. Burford Printing Company awarded contract to publish *THE JOURNAL* for 1934. Details of this were arranged by the Executive Committee. Dr. Miller moved that the contract be approved; seconded, and carried.

#### SUGGESTIONS AND PROPOSALS FOR 1934 MEETING AT INDIANAPOLIS

Tuesday, Wednesday and Thursday, October 9, 10 and 11, 1934, are the dates set by the Executive Committee upon order of the Council. These dates were approved by the Council.

##### 1. General outline of suggested program.

*Monday, October 8, 1934*

Meeting of health officers and special societies such as:

1. Indiana Roentgen Society
2. Indiana State Conference of Catholic Hospitals
3. Indiana Academy of Ophthalmology and Otolaryngology
4. Midwest Association of Anesthetists
5. State Laboratory Directors
6. Indiana State Hospital Association
7. State Health Officers' Conference

Monday evening—a meeting with a speaking program of interest to all these groups. (This may be a public meeting.)

*Tuesday, October 9, 1934*

Morning—Registration, Golf

Afternoon—Meeting of House of Delegates

Evening—Smoker and stag party. Medical Follies for physicians. Separate party for wives

*Wednesday, October 10, 1934*

Morning—General meetings

Afternoon—Section meetings

Evening—Banquet

*Thursday, October 11, 1934*

Morning—General meeting

Afternoon—Clinics

This program was adopted by the Council after the original draft had been revised as above printed, upon the motion of Dr. Shanklin, seconded by Dr. Romberger.

2. *Convention facilities for 1934.* A report was made to the Council by Dr. John Carmack, chairman of the Local General Arrangements Committee, concerning hotel accommodations, routes, clinic accommodations, exhibit spaces, entertainment, etc.

3. *Scientific exhibit.* Moved by Dr. Shanklin, seconded by Dr. Romberger, that the scientific exhibit shall be continued and adequate expense allowed.

4. *Employment of professional medical stenographers.* Dr. Shanklin made a motion, seconded by Dr. Wadsworth, that professional stenographers be employed and that the same arrangement be continued as was used at the French Lick session, where Miss Toman took notes on the ear, eye, nose, and throat section meeting and Miss Kribs took notes on the House of Delegates and Council meetings. By the use of the office personnel it was pointed out that a considerable saving had been made in stenographic expenses.

MEMBERSHIP PROBLEMS

1. *Membership report by districts.*

MEMBERSHIP REPORT  
INDIANA STATE MEDICAL ASSOCIATION  
DECEMBER 31, 1933

COUNTY SOCIETY	No. M.D.s in County	Members Dec. 31, 1933	Members Dec. 31, 1932	—Loss Gain	Eligible Non- Members	New Members	Removed and Retired	Deceased	Ineligible
<b>1ST DISTRICT—</b>									
Posey.....	23	13	13	...	6	1	2	...	2
Vanderburgh.....	142	99	94	5	23	8	15	4	3
Warrick.....	19	6	6	...	10	1	3	...	...
Spencer.....	19	11	9	2	6	...	2	...	1
Perry.....	11	9	9	...	2	...	...	...	...
Gibson.....	32	24	24	...	2	...	6	...	...
Pike.....	11	6	6	...	3	...	1	...	1
Total.....	257	168	161	7	51	10	29	4	7
<b>2ND DISTRICT—</b>									
Knox.....	62	24	29	—5	34	...	4	...	...
Davies-Martin.....	30	23	22	1	4	1	1	1	1
Sullivan.....	28	22	22	...	3	...	3	...	...
Greene.....	24	14	14	...	8	2	...	1	1
Owen.....	14	9	8	1	2	1	1	...	2
Monroe.....	37	34	32	2	3	2	...	...	...
Total.....	195	126	127	—1	54	6	9	3	4
<b>3RD DISTRICT—</b>									
Lawrence.....	32	23	21	2	1	1	8	...	1
Orange.....	26	18	20	—2	4	1	3	1	...
Crawford.....	10	3	4	—1	6	...	...	...	...
Washington.....	15	8	8	...	1	1	4	1	1
Scott.....	6	2	3	—1	...	...	3	...	...
Clark.....	27	16	17	—1	10	...	...	...	...
Floyd.....	54	42	41	1	2	1	5	1	5
Harrison.....	14	5	5	...	2	...	2	1	1
Dubois.....	21	15	15	...	2	...	2	2	...
Total.....	205	132	134	—2	32	4	28	6	10
<b>4TH DISTRICT—</b>									
Brown.....	...	...	...	...	...	...	...	...	...
Bartholomew.....	35	24	23	1	3	1	2	3	3
Decatur.....	25	18	18	...	5	1	2	...	...
Jackson.....	22	17	18	—1	3	...	...	...	2
Jennings.....	12	10	10	...	2	...	...	...	...
Ripley.....	20	15	13	2	4	...	2	...	...
Jefferson.....	28	18	17	1	4	3	6	...	...
Switzerland.....	8	6	6	...	1	...	...	...	1
Dearborn-Ohio.....	25	17	17	...	1	...	3	2	4
Total.....	175	125	122	3	23	5	15	5	10
<b>5TH DISTRICT—</b>									
Parke-Vermillion.....	38	22	15	7	12	3	3	...	1
Putnam.....	22	17	16	1	...	1	2	3	...
Vigo.....	132	112	116	—4	7	5	5	1	7
Clay.....	22	15	16	—1	6	...	...	...	1
Total.....	214	166	163	3	25	9	10	4	9
<b>6TH DISTRICT—</b>									
Hancock.....	22	17	17	...	2	...	2	...	...
Henry.....	39	30	25	5	5	3	1	...	3
Wayne-Union.....	86	50	48	2	19	4	8	...	9
Fayette-Franklin.....	29	21	22	—1	2	...	4	...	2
Rush.....	25	21	20	1	4	1	...	...	...
Shelby.....	35	19	18	1	9	...	7	1	...
Total.....	236	158	150	8	41	8	22	1	15

MEMBERSHIP REPORT—Continued

COUNTY SOCIETY	No. M.D.s in County	Members Dec. 31, 1933	Members Dec. 31, 1932	—Loss Gain	Eligible Non- Members	New Members	Removed and Retired	Deceased	Ineligible
<b>7TH DISTRICT—</b>									
Hendricks.....	28	16	16	...	7	1	3	...	2
Marion.....	782	467	483	—16	241	26	27	3	44
Morgan.....	32	18	22	—4	9	2	5	...	...
Johnson.....	24	9	11	—2	11	...	2	1	2
Total.....	866	510	532	—22	268	29	37	4	48
<b>8TH DISTRICT—</b>									
Madison.....	94	60	60	...	25	3	7	...	2
Delaware-Blackford.....	90	61	66	—5	14	3	7	...	5
Jay.....	24	14	11	3	8	1	1	...	1
Randolph.....	34	23	20	3	6	3	4	...	1
Total.....	242	158	157	1	53	10	19	...	9
<b>9TH DISTRICT—</b>									
Benton.....	18	12	13	—1	2	...	1	1	2
Fountain-Warren.....	26	20	18	2	3	2	1	...	2
Tippecanoe.....	94	78	81	—3	9	4	5	2	1
Montgomery.....	51	29	30	—1	13	2	9	...	...
Clinton.....	37	22	22	...	5	1	6	1	3
Tipton.....	18	11	10	1	4	1	3	...	...
Boone.....	28	11	9	2	13	2	2	...	2
Hamilton.....	29	23	23	...	3	...	1	...	2
White.....	21	6	6	...	13	...	1	...	1
Total.....	322	212	212	...	65	12	29	4	13
<b>10TH DISTRICT—</b>									
Lake.....	257	183	175	8	54	14	12	1	8
Porter.....	26	22	22	...	3	1	3	...	...
Jasper-Newton.....	23	13	15	—2	8	...	2	...	...
Total.....	306	218	212	6	65	15	17	1	8
<b>11TH DISTRICT—</b>									
Carroll.....	22	21	19	2	...	3	1	...	...
Cass.....	49	33	30	3	11	2	2	...	3
Miami.....	35	20	21	—1	14	...	1	...	...
Wabash.....	33	27	26	1	4	3	2	...	...
Huntington.....	33	21	24	—3	8	...	2	...	2
Howard.....	42	31	32	—1	4	...	2	1	5
Grant.....	83	44	41	3	23	4	9	3	6
Total.....	297	197	193	4	64	22	19	4	16
<b>12TH DISTRICT—</b>									
Lamarange.....	14	8	8	...	4	...	2	...	...
Steuben.....	22	9	10	—1	12	...	1	...	...
Noble.....	28	25	23	2	1	3	1	...	...
Dekalb.....	30	21	20	1	6	1	3	...	1
Whitley.....	15	10	10	...	2	...	...	...	...
Allen.....	200	133	146	—13	33	2	13	3	22
Wells.....	21	15	16	—1	5	...	...	...	1
Adams.....	24	16	17	—1	3	2	4	...	...
Total.....	354	237	250	—13	66	8	26	3	26
<b>13TH DISTRICT—</b>									
LaPorte.....	65	47	45	2	9	3	9	1	...
St. Joseph.....	177	134	140	—6	22	4	10	1	11
Elkhart.....	84	69	74	—5	7	...	5	1	3
Starke.....	9	...	...	...	...	...	...	...	...
Pulaski.....	9	5	6	—1	4	1	...	...	...
Fulton.....	16	11	12	—1	4	1	1	...	...
Marshall.....	33	19	16	3	8	2	3	...	3
Kosciusko.....	29	17	19	—2	6	1	3	1	3
Total.....	422	302	312	—10	60	12	32	4	20
<b>SUMMARY BY DISTRICTS</b>									
1st District.....	257	168	161	7	51	10	29	4	7
2nd District.....	195	126	127	—1	54	6	9	3	4
3rd District.....	205	132	134	—2	32	4	28	6	10
4th District.....	175	125	122	3	23	5	15	5	10
5th District.....	214	166	163	3	25	9	10	4	9
6th District.....	236	158	150	8	41	8	22	1	15
7th District.....	866	510	532	—22	268	29	37	4	48
8th District.....	242	158	157	1	53	10	19	...	9
9th District.....	322	212	212	...	65	12	29	4	13
10th District.....	306	218	212	6	65	15	17	1	8
11th District.....	297	197	193	4	64	22	19	4	16
12th District.....	354	237	250	—13	66	8	26	3	26
13th District.....	422	302	312	—10	60	12	32	4	20
Total.....	4091	2709	2725	—16	867	150	292	43	195



2. 1934 membership report:

Number of members on January 12, 1934.....	910
Number of members on January 12, 1933.....	689
Gain over last year.....	221

COUNTY SOCIETY ACTIVITIES

1. Counties where there are no societies—Brown and Starke. See Dr. Christophel's remarks in councilor report in regard to efforts to reorganize Starke County, and Dr. Wadworth's remarks in regard to the Knox County reorganization. Suggestion by Dr. Van Buskirk that an organization similar to the Northeastern Academy of Medicine, where four counties have a joint scientific meeting each month, might be worked out for Starke, Pulaski, Fulton, and Marshall counties.

ANNUAL SESSION OF AMERICAN MEDICAL ASSOCIATION

1. The executive secretary was instructed to attend the annual session of the American Medical Association, which will be held at Cleveland from June 11 to 15, 1934.
2. Letter from Olin West, M. D., stating that one alternate delegate elected to serve for Indiana could not qualify because he had failed to maintain his fellowship in the American Medical Association, read to the Council. (Fellowship in the A. M. A. depends upon a payment of \$7.00, which entitles one to a subscription to the American Medical Association *Journal* or to one of the special journals.) The secretary was instructed to get in touch with the alternate delegate in question and find out if the lapse of his fellowship was due to an oversight, and if such was the case to make an attempt to have the alternate qualified to sit in the House of Delegates of the American Medical Association. In case this could not be accomplished, the Council, upon a motion by Dr. Romberger, elected Dr. Shanklin to fill the place as alternate delegate.

NEW BUSINESS

1. *National legislative affairs.*
- (a) Letters from Louis Ludlow and Dr. W. H. Larrabee, Indiana congressmen, along with a note from Harry Bassett, a member of the United States Employees' Compensation Commission in regard to the cooperation of the medical societies in appointment of physicians to take care of C. W. A. workers who are injured or contract occupational diseases while in the employment of the government, read.
- (b) Discussion of transient indigent establishments, the Tug-well pure food and drug bill and malnutrition propaganda.
2. Program for ninth annual secretaries' conference, Lincoln Hotel, Indianapolis, Sunday, January 21, 1934, brought to the attention of the Council.
3. Membership roster. The Executive Committee presented to the Council a plan whereby a membership roster was to be published as of December 1 in the December issue of the 1934 *JOURNAL*. Moved, seconded, and carried that the Council approve this.
4. Postgraduate course. Vanderburgh County has asked for postgraduate course in 1934. Moved, seconded, and carried that this county be granted the course.
5. Dr. Austin told of the fact that the constitutionality of the garnishee law was to be tested in Madison County. Dr. Austin stated that the men who were going to make a test of the constitutionality of this law wanted to know whether or not the State Association would contribute any funds to make such a fight. The Council disapproved the contributing of any funds to carry on this fight or having the State Association take part in it in any way.
6. Disapproval of the Indiana University School of Medicine undertaking any plan or making any survey to place physicians in rural communities voiced by Dr. Wadsworth.

7. The following letter from Mrs. Clara Porter Yarnelle was read:

"The family of Dr. Miles F. Porter wants to thank, through you, the members of the State Association for the very beautiful flowers you sent at the time of Dr. Porter's death. Our father highly valued the respect and good will of his confreres, and it is comforting to us who miss him so sorely to know that one of his desires was granted in large measure.

"With the deep appreciation of all of us, I am

Sincerely yours,

CLARA PORTER YARNELLE."

ELECTIONS FOR 1934

Upon the motion of Dr. Hare, seconded by Dr. Austin, and carried, the present members of the Executive Committee, Dr. William H. Kennedy and Dr. H. H. Wheeler, were re-elected for 1934.

Upon the motion of Dr. Shanklin, Dr. O. O. Alexander, of Terre Haute, was re-elected unanimously chairman of the Council.

There being no further business, the meeting was adjourned.

THOMAS A. HENDRICKS,  
*Executive Secretary.*

INDIANA DIVISION OF PUBLIC HEALTH

DIVISION OF COMMUNICABLE DISEASES

Monthly Report, December, 1933

Compared with the previous month reports from the health authorities throughout the state for December indicate increases in the prevalence of all the more common reportable communicable diseases, with the exception of diphtheria and influenza, which showed considerable decreases. Due to the irregularity of mail during the two week ends preceding Christmas and New Years the cards were received late, which caused the statistics to be abnormally high for some weeks, while they fell off considerably during other weeks. However, all cards were tabulated and the totals for the entire month are correct.

Below is a table showing the totals of all reportable diseases and indicates the distribution among the urban and rural areas.

Diseases	Total	Urban	Rural
Tuberculosis .....	101	73	28
Chickenpox .....	741	615	126
Measles .....	248	159	89
Scarlet Fever .....	870	343	527
Smallpox .....	15	10	5
Typhoid Fever .....	13	13	0
Whooping Cough .....	199	109	90
Diphtheria .....	291	122	169
Influenza .....	187	3	184
Pneumonia .....	42	2	40
Mumps .....	38	26	12
Polioomyelitis .....	3	1	2
Meningitis .....	7	5	2
Encephalitis .....	2	0	2

INFLUENZA. As mentioned in the foregoing paragraph, this disease decreased as compared with the reports for November. During the current month 187 cases were reported, while for the preceding month there were 217 cases. During the corresponding month of last year the state experienced an epidemic so that a true comparison cannot be drawn with that total of 5,118 cases.

**SCARLET FEVER.** This disease remained fairly stable; however, the total of 870 cases for December, 1933, as compared with the total of 571 cases for December, 1932, is quite high. The normal average for December, over a period of seven years is 585 cases. The cases were fairly well distributed throughout the state, with Marion, Laporte, Lake, Saint Joseph, and Vanderburgh counties all reporting totals of 50 cases or over.

**DIPHTHERIA.** This disease showed the most appreciable decrease of any. The total of 291 for the current month compares very favorably with the total of 489 cases for November, and also with the total of 388 cases for December a year ago. The estimated expectancy for the month of December is a total of 232 cases.

**TYPHOID FEVER.** A new level was reached in this disease, the total for the entire current month being only 13 cases. Such a decline might be anticipated considering the season of the year; however, during the corresponding period of a year ago there were 23 cases reported.

**SMALLPOX.** Although the total of 15 cases reported during December is three cases more than for the previous month, this disease continued to maintain the very low level which has occurred during the entire year. Delaware County leads, reporting six cases out of the total.

**MENINGOCOCCUS MENINGITIS.** Marion County reported the entire total of seven cases for the current month. During December of 1932 there were 14 cases reported, Marion County then reporting 10 cases out of this total.

Spencer County reported two cases of encephalitis lethargica; Marion County reported three cases of poliomyelitis.

#### FLOYD COUNTY MEDICAL SOCIETY

The Floyd County Medical Society met in annual session at Woolworth's Cafeteria, December 8, 1933, at eight p. m. Twenty-three members, their wives, and friends were present.

Dr. William Winstandley, the president, presided and was toastmaster.

Following the banquet, several vocal selections were given by Mr. George W. Schneider, accompanied at the piano by Mr. Otto Everbach. These vocal numbers were immensely enjoyed by the guests and doctors.

The secretary read his annual report in which he gave the financial standing of the society as "broke" because of the frozen assets in closed banks. We have forty-two members all in good standing. We acquired one new member during the year and lost one member, Dr. William H. Ratliff, by death. Ten regular meetings and three special meetings were held during the year, with an average attendance of fifty-two per cent, the best attendance of the society in its history.

Doctor Walter J. Leach, president-elect of the Indiana State Medical Association, gave a talk in which he briefly outlined the activities and work of the State Association. His remarks were well taken.

The following were elected to office to serve the coming year: president, W. F. Edwards, M. D., New Albany; vice-president, Parvin M. Davis, M. D., New Albany; secretary-treasurer, P. H. Schoen, M. D., New Albany; censors, Robert W. Harris, M. D., William L. Starr, M. D., Henry B. Shacklett, M. D.; and delegate to the state meeting, P. H. Schoen, M. D., with alternate, William Winstandley, M. D.

It was the consensus of opinion of those present that this was one of our best and most successful years and the best meetings the society has held in several years.

A good social time was had and the meeting adjourned at a late hour.

P. H. SCHOEN, M. D., Secretary.



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## ORIGINAL ARTICLES

### FRACTURES\*

JAMES Y. WELBORN, M. D.  
EVANSVILLE

That portion of our general practice which includes bone trauma has increased rapidly through the greater use of machinery and present day motor power. It has led to especial attention by our national societies, by the appointment of a five-year Fracture Committee, and also a suggested idea in our hospital standardization that all hospitals should have one member of the staff to act as consultant and advisor in fractures coming to that hospital for treatment by any staff member.

While these two efforts are not at once apparently forceful, I think they will be momentous in leading the way to a more standardized method of treating fractures.

We all know there will be a dragging tendency against using the orthopedist as consultant in the average hospital case, but it secondarily inculcates in the man handling a fracture case a sense of responsibility to the hospital as well as to the case being treated which leads to a closer study of theories and practices of bone work being put out by present day leaders.

There has been some suggestion by the American College of Surgeons that hospitals announce to the general practitioners of a community that they will furnish room and laboratory facilities for general examinations, thus furnishing to the physician with a fracture case a convenience to x-ray and treatment of the case even though it need no hospitalization. This system is more or less in effect in certain communities and when practiced properly it will be an economic success. The very fact that fractures require such a great lot of mechanical apparatus in diagnosis and treatment, and require more or less temporary help for the operator, leads us to realize that this type of work can be more efficiently and economically done in groups or hospital centers than at the physician's office.

It has been my experience that often the first treatment may be the greatest and most important part of the management of any case. The orthopedist's service in the complicated case also has somewhat of a divided responsibility effect. Therefore, the idea for cooperation of services in these cases definitely leads to a higher degree of good results.

In this discussion I do not pretend to offer anything new in devices or treatment, but do want to mention some things which may be considered as pitfalls in fracture work. For instance, under the strain of excitement, the physician feels forced sometimes to move a fractured skull case to the hospital at once, possibly a fifty-mile jolting trip tending to increase intracranial hemorrhage, rather than wait 24 to 36 hours until there is less danger from bleeding and the patient has had an opportunity to overcome any shock that might arise soon after an accident; this is very urgent in fractures of the base of the skull. There must, of course, be exceptions to such precautions because of soft tissue lacerations, depression of bones or other complications which might offset the first-named precaution. Any patient suffering shock or not apparently needing immediate surgery should not be x-rayed at once after entering the hospital. Overcoming shock is the first important treatment.

Another pitfall in skull fractures is a tendency for too much operative surgery. Excepting in extreme pressure cases, I would feel very reluctant about raising ordinary depressions unless they are producing emergency symptoms.

Fractures of the spine in any form with no pressure symptoms are too often left on simple mattress support, when on a Hawley table, or in the absence of the table an improvised canvas hammock, they can be put in the lordosis position for a half trough plaster cast, and if necessary an anterior half to complete the circle. This gives general support to the body and enables the nursing staff to roll the patient over, to place the patient in the top half, face down, for back attention, thus avoiding improper curves of the back and also possible necrosis of the skin and soft parts. When pressure symptoms develop such cases are too often treated expectantly before any effort is made to relieve the pressure which, when left on too long, causes permanent paralysis. Such cases should have the cast made at or before the operation. No class of fractures gives such bad

\* Presented before the Section on Surgery of the Indiana State Medical Association at French Lick, September, 1933.

results as these, chiefly because rupture of the spinal cord may be complicating the fracture.

I know of no fracture more poorly treated than the Colles' fracture. Do not reduce without an anesthetic. Do not be satisfied without over-reducing. Do not make a standard dressing of anterior-posterior splints. Do not fail to get satisfactory position at the first reduction, then x-ray to prove it. There can be no routine method of putting up a Colles' fracture, because of the many types of injuries to the soft tissues as well as the bone. Probably the safest is the anterior-posterior plaster of paris board to be molded as it hardens, to suit the certain case; as near as complete flexion of the hand with slight extension of the hand outward will about fit most cases; this for ten days, then new plaster boards are applied with less flexion. Where plaster strips are used, the danger of tightness is eliminated and adjustments are easily made.

The most frequent error in treatment of fractures is about the elbow. For instance, in putting up at right angles when there is a fracture of the epiphysis or a T-fracture of the lower end of the humerus, do not dress such fractures at right angles. Do not use circular plaster for such a position. Hemorrhage about any joint fracture must be dealt with according to the amount of pressure it produces. I have found it the most common in this type of fracture. In such cases complete flexion would be impossible. If aspiration or open incision can be accomplished the procedure would be proper. Unfortunately, extravasation between the various layers of soft tissues may prevent the removal, requiring the arm to be placed in moderate flexion, which may be increased when the swelling recedes. Surgery about this joint has many hazards, yet I have found it necessary in many cases on account of the misplaced condyles. With good technic there is less danger to infection than leaving excess hemorrhage-torn tissues and misplaced bony fragments. We never know for certain what is behind the scene. This applies to any part of the body; if we have fractures of bony parts, what about the soft tissues? When soft tissues are mangled and the spaces filled with large amounts of clotted blood, it is far safer to use sane surgical means to evacuate the clots, remove bruised and devitalized tissue and repair muscle and tendons.

Fractures of shafts require two essentials, angles and tension. With the femur, the neck included, difficulties arise if the proper angle is not sought and maintained. Most all splints are devised with that in mind, yet often maintained only with constant observation. It appears to me that with the newer devices there will be fewer excuses for the surgeon to do an open reduction. Since we have learned to use Bohler's and the Anderson splints, I find it very seldom necessary to do an open reduction. Muscles can be caught between bones. Usually if they do, the effect of covering the ends

is not complete, also that portion perishes and is not the sole cause of non-union or soft union. I believe that proper placements and proper modes of extension will almost always allow good apposition. No matter where the fracture, a little looseness of the splint, allowing some play or movement of bones, does but little harm.

We were formerly taught that as a rule a fractured femur meant a year's disability. This disability period is now much lessened by the use of either of the above splints. Anticipating a great pull by using adhesive moleskin strips is too often misleading. It is better at once to use the Steinmann pin or any form of improved calipers with which there is no loss of pull by slipping. It must be remembered that the double pull on any double inclined frame lessens the amount of weight to be used.

The Anderson splint seems to be giving good results and has the one great advantage for old people who can be set up with this splint and such patients also may be at a very early date removed to their homes, thus affecting the economical side of the question. This splint may be considered as one requiring less adjustment after it is properly applied. There will be less pneumonia following its use and the patients will be stronger when they are ready to begin walking.

There is not so much anxiety in fractures below the knee and results are usually good. The weakest treatment that I know of in bone fractures is our work in this part of the body, not for results, but for the term of hospitalization which many of these cases get and the great loss of time such cases are out of work. What I say relates to the simple or comminuted fractures of the tibia and fibula. Long continued disuse of these extremities causes slow and often non-union, whereas if there is more activity and actual function, healing results rapidly. Delbet of Paris began the ambulatory splint, which for many cases has made a wonderful progress in our treatment. This plaster of paris cast is applied at once after the accident by two lateral halves so that they are a long slender "V" from the foot up to support the weight, allowing the patient to walk about, even the first few days. In this country this splint is not in use as much as it should be. Newer forms of ambulatory splints for both fractures of the femur and tibia are possible to displace older forms of apparatus.

412 S. E. Fourth St.

## DISCUSSION

E. V. WISEMAN, M. D., Greencastle: The plans suggested in the first part of Dr. Welborn's paper seem feasible and should get better results in fracture work and probably result in fewer court cases.

Concerning the treatment of skull fractures, I should like to add a few suggestions. The matter



of transportation in these cases was mentioned and what the essayist said I believe is good. Usually these cases are in shock and we only add to the shock by moving them. Only a small percentage of these patients require emergency surgery, except for repair of lacerations to prevent infection. Only two types require emergency surgery: The first is fracture with extradural hemorrhage, in which cases the injured one usually is unconscious following the accident for a short period, then he regains consciousness for a time, only to have coma supervene and steadily deepen, with symptoms of localized intracranial pressure as evidenced by irregular, weak, fast pulse, respiratory difficulties and muscular spasms, always beginning in the face of the opposite side and extending down into the arm and possibly leg, which give the doctor a rather definite idea as to where the hemorrhage is; these cases can often be saved by emergency surgery. The second type of case is head injuries which get past a certain arbitrary period, perhaps six or eight hours, are comatose, have an irregular pulse, rising temperature, respiratory difficulties and are fast declining. A small percentage of these cases may be saved by a right subtemporal decompression.

I do not know what your experience and practice is in these cases as to the use of spinal puncture and the injection of dextrose, sodium chloride, magnesium sulphate and such agencies, but in my opinion these procedures are usually not only unsafe but may be dangerous, and never saved a life. I think, summing up the treatment, if you call it treatment, leaving the patient alone, avoiding moving him or x-raying or otherwise disturbing him, and watching for any and every sign of increasing intracranial pressure with decompensation, is the best. These things are not necessary for either diagnosis or treatment in most cases. The patient should always be closely watched, and in a small percentage of cases, perhaps less than ten, emergency surgery should be resorted to.

As to the treatment of fractures of the spine, I quite agree with Dr. Welborn's suggestion that treatment in cases with pressure symptoms without attempting to relieve the pressure is bad, when emergency surgery offers such splendid results if done properly and at the proper time.

I wish to say just a word about the operation of laminectomy. It is oftentimes impossible to do an adequate operation because of the condition of the patient. If the condition will permit, a more radical procedure, that is, the removal of the laminae from an extra vertebra above and below the injury, may make the difference between a good result and complete failure.

As to the treatment of Colles' fractures, of course most of us do them fairly well. I have just one suggestion. My experience is that it is seldom necessary to give these patients general anaesthesia to make the reduction. Most of them can be done by injecting one or two per cent novo-

caine into the fracture line, then proceeding to reduce the fracture and apply proper splints. When this is done the patient can be sent home and does not need to go to bed nor to the hospital unless he wants to. As to the treatment of fractures around the elbow, it seems to me there are many pitfalls there. One is that we do not examine the patient carefully enough with regard to possible nerve injury. I have seen cases that have been treated before the matter of nerve injury had been investigated. Possibly the nerve injury occurred at the time of the fracture, or at the time of reduction, or even from improper splints. We should know whether there is a nerve injury before any treatment is undertaken if we are to do good fracture work and stay out of the courts.

Another fracture not mentioned by Dr. Welborn is that of the carpal scaphoid. This condition is usually diagnosed as a sprained wrist. The treatment for a sprained wrist and for a fracture of the carpal scaphoid are entirely different. If this condition is not properly treated, and occasionally if it is properly treated, it is attended by a bad result. If the case is treated as a sprain the result is almost sure to be bad. A sprain may be treated or not treated and get along pretty well, but a fracture of the carpal scaphoid requires immobilization in anterior-posterior splints, the thumb and hand in slight radial deviation, in a neutral position, for a period of six to seven weeks. Usually the fragments of bone will unite. In the use of these new splints (Anderson and Bohler) I have had no personal experience, but from what I know of them they are a decided improvement and will prevent a number of open operations for fractures of the long bones.

EDWARD T. STAHL, M. D., Lafayette: Most of the cases of skull fracture that I see are in the hospital, and in those cases I always like to have a frequent blood pressure reading, at least during the first twenty-four hours following the injury. It gives valuable information and is a great help in these cases, as the variation of the blood pressure throws much light on the condition. I think it should be done routinely.

ROBERT A. MILLIKEN, M. D., Indianapolis: I was glad to hear Dr. Welborn voice a tendency which I hope is coming to pass. For a number of years I think the general man has been inclined to doubt his responsibility in the matter of fractures and to turn them over to the nearest orthopedist and wash his hands of them. I think this is a very vicious tendency and should be overcome because a fracture necessarily must always be treated by whoever is at hand. Fractures do not permit of consultation and long waits. They should be treated promptly. Consequently whoever cares for the patient should be quick, should immediately take care of the fracture, and that means that the function of the orthopedist is to be merely that of a consultant when real trouble occurs, and prob-

ably as an instructor and guide in the community in the general standard of the treatment of fractures.

I am sorry that Dr. Welborn included any discussion of skull fractures in this paper on fractures. A skull fracture is not a fracture problem at all. It is a brain problem and a nerve problem. I do not think that I have ever seen a real bone problem connected with a skull fracture. The only question we consider is how much damage has been done to the brain that is inclosed within the skull.

There is one thing I should like to add to what Dr. Welborn said as to the proposition of treatment of fractures of the spine. He mentioned the lordosis position, but he did not mention the fact that if the lordosis is made extreme enough and if enough pressure is made in the application of the plaster, very frequently that will bring the spine in such a position with the fragments spread apart accordion-wise, and thus allow the soft cancellous bone to be renewed without pressure. That can be done with no danger whatsoever.

CLEON A. NAFE, M. D., Indianapolis: I have been much interested in the discussion, and especially in what Dr. Milliken has said. I think it would be well in a meeting of this kind, where we are mostly general surgeons, to recall that it is a very serious undertaking to make an open reduction of a fracture, and to warn against this tendency. The general surgeon, or any surgeon, should be urged to use every means to make a satisfactory closed reduction, and when an open reduction is contemplated he should be sure that the very best aseptic technique is employed. I have been associated with a general city hospital for many years and have seen some very unfortunate results following open reductions, which I do not recall seeing following closed reductions. It is well therefore to weigh the situation and consider the dangers very carefully before a general surgeon in the average hospital undertakes to do open reductions.

J. R. PUGH, M. D., Hammond: I wish to stress one point that Dr. Welborn touched upon, but I believe did not emphasize sufficiently, and that is the necessity of prompt treatment of fractures. At present, more than ever before, the fact is being realized that a fracture is an emergency case the same as any other emergency, such as acute appendicitis, etc. The old practice of delay in reducing a fracture is wrong, and an abundance of experience has proved that the sooner a fracture has been reduced the better have been the results. More and more this fact is becoming known to the profession as a whole. It is also gratifying to note the strong tendency that is developing to avoid open operations as much as possible.

## DIABETES AS IT CONCERNS THE SPECIALIST AND THE FAMILY PHYSICIAN\*

HENRY J. JOHN,† M. D.  
CLEVELAND, OHIO

Diabetes means a deficiency of the internal secretion of the islands of Langerhans in the pancreas. This deficiency may be slight or quite marked. Both types of deficiency constitute diabetes, though the first produces practically no clinical symptoms, such as are described in the text books, whereas the latter presents some or all of the symptoms of thirst, polyuria, nocturia, genital itching, and loss of weight. However, if the presence of most of these cardinal clinical symptoms were to be regarded as necessary for the diagnosis of diabetes, 80 per cent of diabetic cases would be overlooked. Furthermore, it must be kept in mind that the best time to treat diabetes is in its incipency, as is true of tuberculosis or cancer, and not when the patient is at the end of his rope, when but little can be accomplished.

### DIAGNOSIS

In the definite cases presenting several of the cardinal symptoms of diabetes, the diagnosis is simple. Heavy glycosuria with the classic symptomatology is a reasonable sign that diabetes is present, and a blood sugar test, fasting or preferably two and a half hours after a meal, offers final and positive proof.

There are cases, however, in which there is only a trace of sugar in the urine, or only a slight hyperglycemia of 130 to 140 milligrams per hundred cubic centimeters in which no clinical symptoms are present. Without further evidence, it cannot be said that such a finding indicates the beginning of diabetes. Such a finding suggests definitely the need for a glucose tolerance test which is done by giving the fasting patient 100 grams of glucose dissolved in a glass of water, ice cold, with the juice of one lemon added, and then by checking the blood sugar at the beginning and one-half, one, two, three, and four hours after the glucose has been ingested, and by examining the urine hourly to see whether or not glycosuria appears. This also indicates the patient's renal threshold for sugar; it tells how high the blood sugar must rise before sugar appears in the urine.

If the patient is diabetic, he is unable to burn and to store the glucose readily and this sugar collects in the blood stream for four to nine hours, and consequently the blood sugar curve rises high and declines very slowly. On the other hand, if the patient is not diabetic, he utilizes and stores the sugar readily so that there is no accumulation of sugar in the blood stream; consequently, the curve rises but slightly and declines to normal promptly; that is, in an hour to an hour and a

\* Presented before the Muncie Academy of Medicine, 1933.

† Cleveland Clinic.



half. This is a tremendous subject in itself and is treated at length in the existing literature.

The glucose tolerance test, then, is the best method for the differential diagnosis of diabetes in cases of glycosuria or hyperglycemia. Like any other laboratory test, however, it has its pitfalls which must be watched for and avoided. Some of these are the presence of infection, mental or emotional disturbances, hyperthyroidism, and rigid diet before the test, all of which tend to raise the blood sugar curve and must be taken into consideration in the interpretation of the results.

The finding of normal fasting blood sugar in the presence of glycosuria does not rule out diabetes. This is a common error which is made in practice. To avoid mistakes, one should always demand a blood sugar determination, two and a half hours after a meal, preferably after a heavy carbohydrate meal. The results of two types of glucose tolerance in cases of glycosuria are shown in Chart 1. In all but No. 5 there is a normal level of fasting blood sugar. If this fasting blood sugar alone were taken as a diagnostic criterion, an error of 50 per cent would be made, for the upper curves are normal, whereas the lower curves are diabetic. Curve No. 5 was added simply to show how high and prolonged is the hyperglycemia in a diabetic curve.

TREATMENT

Once the diagnosis of diabetes has been definitely established, the problem of treatment presents itself. Can all diabetics be treated alike, or must each case be studied as an individual problem? What criteria indicate just what is being accomplished for the patient?

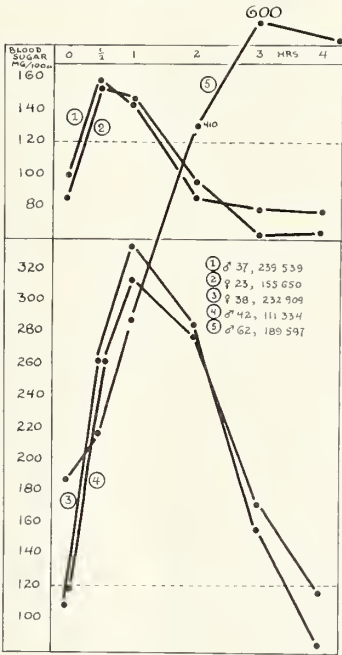


Chart 1. Glucose tolerance tests in five cases of glycosuria. Four have a normal fasting blood sugar, one hyperglycemia.

The first thing to consider in treatment is the age of the patient and the duration of the diabetes.

Diabetes which develops in patients of advanced years usually is mild and is easily controlled. The diet should not be restricted too severely, too much insulin should not be used, especially in persons with arteriosclerosis or with cardiac deficiency. Excessive dosage of insulin may result in hypoglycemia which is undesirable and perhaps even dangerous. Hypoglycemia has been shown to bring on anginal attacks due to the interference with the nourishment of the heart muscle which requires an increase in the work of the heart due to increased minute volume. True angina is produced because the heart muscle gets insufficient nourishment because of spasm or permanent partial occlusion of the arteries. Personally, I have never observed a single fatality from hypoglycemia among the 4,500 diabetic patients I have treated, yet such cases have been reported in the literature, and I am reiterating the warning. If one treats a person in whom diabetes has developed in later years (after the age of fifty years), after preliminary treatment in the hospital, usually only a mild reduction in diet is sufficient. This does not apply to older patients who have severe diabetes of long standing. In such cases more insulin is necessary in order to get the diabetic condition under control and the patient has to continue on a regimen which includes larger doses of insulin. Even in such cases it is better to use small doses of insulin at more frequent intervals, than to administer one or two large doses daily.

Diabetes in the young differs from diabetes in the old. In a general way diabetes in the old may be regarded as due to the senility of the organ, a lessened blood supply to the gland, a lessened vitality of the gland, just as older persons, generally, have lesser strength and lesser endurance. This perhaps is due to sclerotic changes in the blood vessels, which nourish the gland. In a young person the body is properly nourished and full of vigor. Here something else has played havoc with the function of the pancreas. A child with a normal pancreas has an unlimited reserve of insulogenic function, while one born with a deficient pancreas has little or no reserve. There are recorded cases of congenital diabetes. These are not numerous, but there probably are others which are not on record because the condition was unrecognized. It is reasonable to presume that the small insulogenic reserve in such a child can easily be exhausted. Infections affect the pancreas seriously, and if not counteracted promptly may do permanent damage to the organ.

This may be illustrated by the case of a little boy, aged eight years, who was much emaciated when he was admitted to the hospital. (Chart 2.) After three months it was possible to discontinue the use of insulin, his blood sugar having been normal for over a month. Three weeks later he had measles. He lived in a small town, and the

family physician did not think of instituting treatment with insulin, since he did not realize the serious consequences of infection even in mild diabetes. When I saw the boy again two weeks later, his blood sugar was 497, and it was necessary to reinstate the use of insulin and to reduce the diet. The insulin dosage was increased up to 80 units per day in four doses, and the entire course of treatment was repeated. Whether or not perma-

much damage to the pancreas, and with any form of treatment all that can be done is to save whatever function remains, for it is impossible to replace glands which have been destroyed. Early and adequate treatment is necessary in order to prevent any downward progress. The fasting level of the sugar in the blood may be normal and the fasting urine sugar-free, yet at noon and in the evening the amount of sugar may be high. If

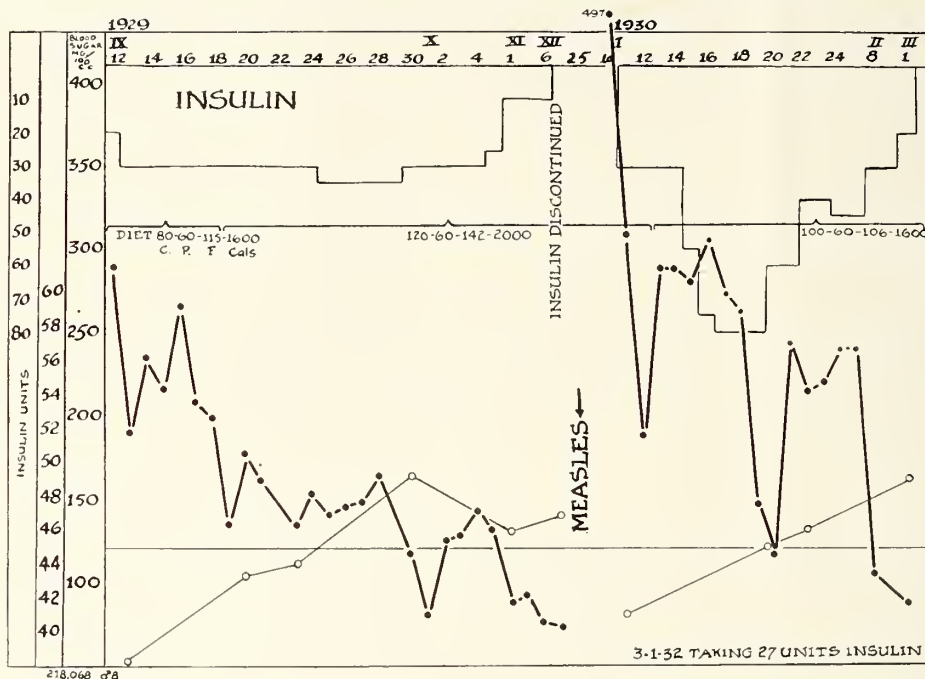


Chart 2. The effect of infection (measles) on the blood sugar of a diabetic child, aged 8 years.

nent damage was done to the pancreas, time alone will tell, but the acute recurrence of symptoms could easily have been prevented by a small dosage of insulin during the course of the acute infection.

From such a classical demonstration of the effect of infection in a mild diabetic state, it is a natural step to apply the same reasoning to the prediabetic state. In a child or an adult who apparently is normal but has a small insulogenic reserve, a superimposed infection may easily exhaust this small reserve and actually precipitate diabetes. Just recently I have analyzed the results of the cases of juvenile diabetes and have found that many of these children developed diabetes shortly after an infection, as is shown in Table I. One cannot help but be impressed with the short time that elapsed between the infection and the development of diabetes in these cases. We do not know, however, what their insulogenic status was preceding the infection. This is one of the problems which can only be solved by future observation and study; meanwhile, we must theorize.

In the case of a diabetic child, the end result depends on how early the treatment is begun. Naturally a diabetic condition of long standing means

such be the case, it is but a question of time until the morning sugar is high. In controlling diabetes in a child, it is necessary to insist that the twenty-four-hour specimen of urine be sugar-free or that it should contain, at most, only a few grams of glucose, and that all three blood sugar determinations be reasonably low. Only then can it be said that the child has had adequate treatment.

The question of diet should be considered carefully. Even though the laboratory findings indicate excellent results on a low-calorie diet while the child is in the hospital, the good results thus accomplished will crash like the proverbial house of cards when the child returns home, for no child or grown person, either, for that matter, will go hungry indefinitely. He may adhere strictly to a given routine for a while in order to reach a certain goal, but sooner or later he will take or steal food to satisfy his hunger. The physician must anticipate this and must give each patient enough to eat and enough insulin to utilize this adequate diet. In children, especially, it is necessary to give proportionately more food to provide for growth and more active energy than in adults. About the average quantity is 100 to 160 grams of carbo-



hydrates, 60 to 80 grams of protein and enough fat to make 1,400 to 2,200 calories.

Individualization is necessary in the treatment of diabetes, for many and varied problems are present. With a person who is emaciated, the first problem is to build him up, then a high-calorie diet and a proportionately high-insulin dosage are indicated. With an obese patient the problem is to reduce his weight and consequently a low diet with little or no insulin is prescribed. A child requires proportionately more food than an adult, which again calls for a diet with more calories and sufficient insulin to enable its utilization.

Table I.  
THE RELATION OF INFECTION TO DIABETES

Infection	Sex	Age	Diabetes after Infection	Diabetic History
			days	
Cold.....	M	15	30	
Influenza.....	M	2	7	
	M	4	60	F
	M	2	18	
	M	4	30	H
	M	18	30	
	M	9	20	H
	F	5	40	H
	F	20	60	
	F	10	8	
	F	16	20	H
	F	16	30	
	F	18	90	
	F	5	24	
	F	15	10	H
Measles.....	M	3	30	H
	M	2	40	
	F	2	14	
	F	3	70	
	F	15	10	
	F	3	60	H
Mumps.....	M	8	2	
	M	7	28	
Dysentery.....	F	10	90	
	M	11	30	
	F	15	2	
	F	3	20	
Pneumonia.....	M	18	30	
	M	17	30	
	M	9	120	
Scarlet Fever.....	M	13	90	F
	M	11	120	
Tonsillitis.....	M	5	7	
	F	8	40	
Boils.....	M	8	30	
	M	14	90	
Glandular Fever.....	M	9	42	
	M	5	21	
Abscessed Tooth.....	F	16	40	H
Gangrenous Appendix.....	F	5	90	
Pyelitis.....	F	13	20	
Mastoiditis.....	M	4	70	
Jaundice.....	M	15	7	

"F" under Diabetic History stands for Familial.  
"H" under Diabetic History stands for Hereditary.

The goal aimed for in all treatment of diabetic patients is sugar-free urine and a normal level of the blood sugar before each of the three meals. This is the ideal result, and no one can hope to achieve it in 100 per cent of cases, and it must not be achieved at the patient's expense. "The treatment must not be harder than the disease," is a golden rule to follow. Do not starve a patient, do not wake him up during the night to give him insulin, try to eliminate the noon dose of insulin as soon as possible, as this is a very impractical time for most people to take insulin. If three doses are necessary, they should be given at break-

fast, at dinner in the evening and a small dose at bedtime. This fits into the routine of any diabetic patient much more conveniently than does the dose at noon. Patients should be warned that whether they eat or fast, insulin must be continued, for

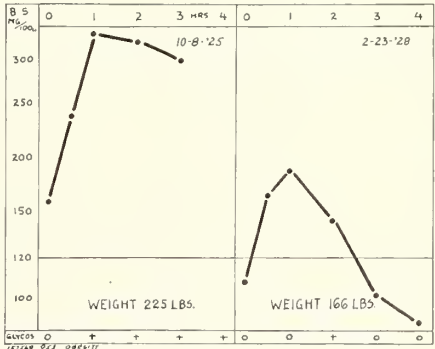
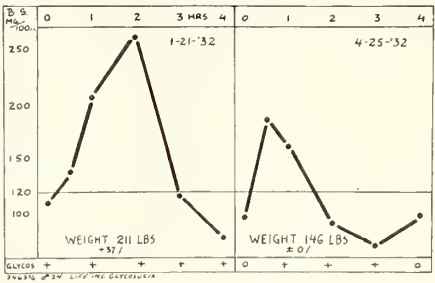


Chart 3. a. Improvement in glucose tolerance following reduction of weight in a man aged 24 years. b. Marked improvement in sugar tolerance after reduction of weight in an obese woman, aged 58 years.

they are constantly burning up calories from their own body reserves and hence need insulin for their utilization. This is being emphasized because most catastrophies hinge on this point. A child who is taking 15 units of insulin three times a day, for example, may have a bad cold and may lose his appetite with resultant development of acidosis and vomiting. The insulin is then eliminated because of the vomiting and anorexia and, of course, the child promptly goes into coma.

Infections such as simple cold, tonsillitis, measles, mumps, scarlet fever or chronic infections in the gall bladder, prostate, apical tooth infection or tuberculosis play havoc in all cases of diabetes. A diabetic patient should not be allowed to have any focus of infection if medical help is to be rendered which will prevent his drifting into more and more severe diabetes. The whole problem revolves around (1) the earliest possible diagnosis, and (2) adequate treatment.

OBESITY

The time is coming when any thoughtful person will consider obesity as a disgrace. There is but a small number of patients who cannot help being obese; the other 97 per cent show the lack of will

power to live properly without the abuse of food. To abuse food is the same as to abuse liquor—both lead to the same fatal end. In a series of 2,000 diabetics, 76 per cent were overweight at some time or another. It is no wonder that obesity is such a prominent factor in the development of diabetes. I look upon every obese person as a potential diabetic until he is proved otherwise.

Fifty per cent of diabetics who are or were overweight and only 25 per cent of those who are not overweight have increased blood pressure. This fact alone shows that obesity leads to an increase of 100 per cent in hypertension. Herxheimer has pointed out that with arteriosclerosis of the kidneys and high blood pressure there is a change in the pancreatic blood vessels and that the resultant changes in the islands are secondary, leading to diabetes.

With the elimination of obesity much diabetes, arteriosclerosis, nephritis and early mortality can be avoided. This is one of the constructive problems for the medical profession to tackle and should be infinitely more fruitful than the hopeless treatment of obesity as such.

Reduction in weight leads to lessening of blood pressure; it also results in improvement in cases of diabetes. Chart 3a represents the results of a glucose tolerance test in a man twenty-four years of age, who had glycosuria and obesity. He was 37 per cent overweight. In three months he reduced his weight by 65 pounds to a normal level for his height and age with a resultant change in the glucose tolerance curve. Chart 3b shows the results in the case of an obese woman fifty-three years of age. She had frank diabetes in 1925. In twenty-eight months she reduced her weight from 225 to 166 pounds with concomitant clinical improvement. These two cases show what can be accomplished by the control of obesity alone.

I have computed the results of 459 glucose tolerance tests in Chart 4 to show the status of the

general 25.8 per cent of patients of normal weight are diabetic. The patients in this group presented themselves for a glucose tolerance test either because of glycosuria or of slight hyperglycemia.

#### GLYCOSURIA

Glycosuria is a symptom and not a diagnosis. A person may have glycosuria and be perfectly normal or may have glycosuria and have diabetes. It is important to classify correctly a given case in order that the physician may give the proper advice and treatment. The only way of differentiating in a case of glycosuria is to do a glucose tolerance test under normal living conditions. In a series of 113 cases of glycosuria found in life insurance applicants one-third were diabetic and two-thirds were non-diabetic. This is about the ratio one finds in a larger series of cases of glycosuria.

A normal glucose tolerance curve, however, is not final proof that the patient never will develop diabetes. It simply tells that at present he is not diabetic. Infection or overeating may bring about diabetes in later years even in such a case. Just recently I saw such a patient who presented a normal glucose tolerance curve in 1927 when he was sixty-five years of age. (Chart 5.) Repeated urine examinations over a period of years have shown sugar-free urine or an occasional trace of sugar. In September, 1932, he was caulking his boat and stood in water for two hours, and as a result had a bad cold. On October 10th, this year, examination revealed a heavy glycosuria and the blood sugar was 272 (2 hours postprandial). A glucose tolerance test was done next day because in view of the test five years before and of his advanced age diabetes seemed unlikely, yet the chart shows the ravages of infection, even at his period of life.

#### SURGERY

Before insulin was used very few operations were performed on diabetic patients. Surgeons did not encourage operating on diabetic patients, as the mortality was very high (reports in the literature showing as much as 80 per cent mortality).

Since the dawn of the insulin era all this has been changed. The literature shows marked decrease in the operative mortality rate in diabetes in the one decade, and as time goes on the present figures no doubt will improve. The average mortality rates as reported in the literature are 31.3 per cent before insulin was known and 12 per cent in the past decade. This means an improvement of about 200 per cent and shows that medical progress is being made in the field of internal medicine.

Nine hundred and twenty-seven operations on diabetic patients have been performed at the Cleveland Clinic during the past ten years and the average mortality in these cases was 5.4 per cent.

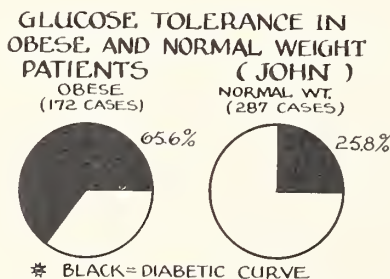


Chart 4. Comparison of glucose curves in obese patients and in patients with normal weight.

obese patient as compared to one of normal weight. Of the 459 patients 172 were obese and 287 of normal weight. This chart shows the incidence of diabetes in the obese (65.6 per cent) compared to the incidence of diabetes in those of normal weight (25.8 per cent). I do not mean to imply that in



There has been a progressive reduction in mortality, however, for the figures from the early years to the present show the following:

YEAR	Number of Operations	Mortality Per cent
1921-1925.....	35	8.5
1925-1928.....	276	4.3
1928-1930.....	462	4.7
1930-1932.....	154	4.5

A diabetic patient requires close medical supervision before, during, and after operation. Saline solutions administered by hypodermoclysis, glucose

postoperative accidents that may occur. In the presence of anoxemia or pneumonia or other serious complications, the oxygen tent should be used promptly, for only early treatment accomplishes a good result.

Chloroform and ether are undesirable anesthetics for diabetic patients because they damage the liver and produce acidosis. Nitrous oxide, local and lumbar anesthesia are preferable.

DIABETIC COMA

Diabetic coma is the most serious crisis to be met in the treatment of diabetic patients. A patient apparently well may be in deep coma within

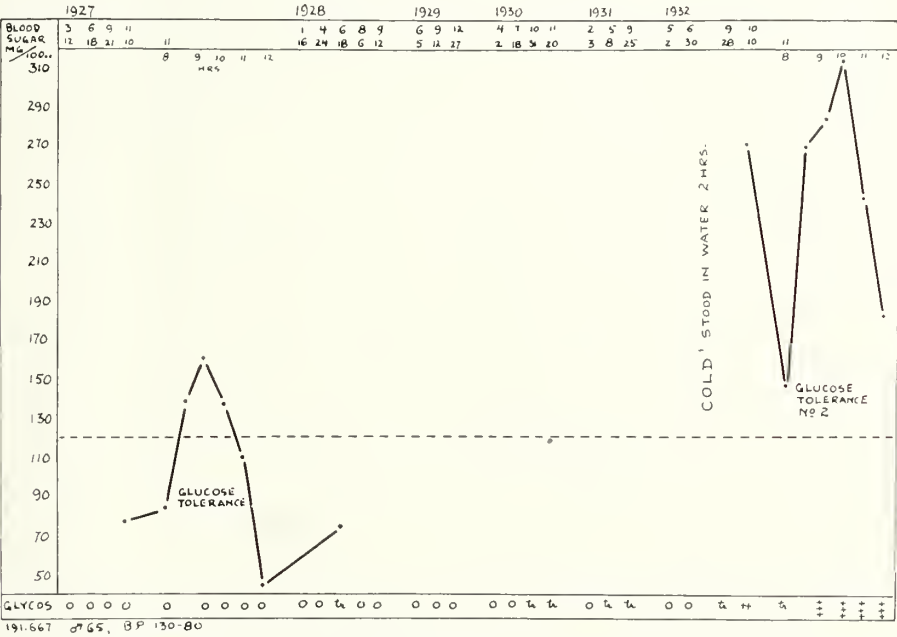


Chart 5. Course of sugar tolerance in a man aged 65 years over a five-year period. In 1927 he presented a normal glucose tolerance curve; in 1932, following an infection, frank diabetes resulted.

intravenously, and insulin as indicated should be given to keep the diabetes under control and to ward off acidosis. On the other hand, too large doses of insulin, especially in older people, should be avoided to prevent hypoglycemia. If large amounts of insulin are indicated small doses should be given frequently. During the first two days laboratory data, including blood sugar, acetone, urea, plasma acetone and carbon dioxide, should be obtained in order that the physician may work with precision. When these complete studies are not practical, estimations of the sugar and acetone in the urine have to be depended upon.

To control vomiting after operation, 10 per cent solutions of glucose should be administered intravenously. Insulin is given in the glucose solution, and if the patient is uncomfortable opiates may also be given in this solution. Such a patient needs to sleep so that he will be refreshed by rest and in a better physiologic condition to combat any

twelve to twenty-four hours. The factor which usually precipitates coma is infection. Factors of lesser importance are the omission of insulin in a severe case of diabetes or lapses of diet. Ether and chloroform may be contributing factors in cases in which the doctor is not aware of the presence of diabetes in the patient.

The widespread use of insulin has brought another problem, that of insulin shock, which, in a way, complicates the picture of diabetic coma. The two conditions resemble each other somewhat and it is extremely important to differentiate them.

If an accurate history can be obtained it furnishes the first and best evidence. If the patient has been taking insulin and his last dose was taken within three hours that alone is strong evidence that the clinical picture is due to insulin shock. The clinical findings alone furnish a good impression, for a patient in diabetic coma is dehydrated, has a parched tongue, and heavy forceful breath-

ing; a patient with insulin shock is not dehydrated, usually is soaked in perspiration and breathes easily. The onset of coma is slow, the onset of insulin shock is rapid. An acetone breath is present in cases of coma and the presence of acetone can be demonstrated in the blood and urine; in insulin shock there is no acetone on the breath

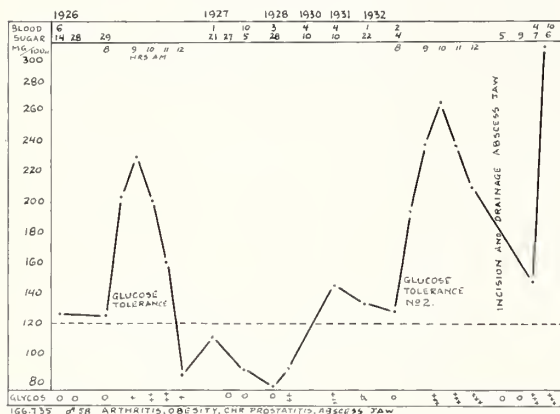


Chart 6. The evolution of diabetes in a man 58 years of age who in 1926 showed a prediabetic state and had arthritis, obesity, and chronic prostatitis. Six years later he had an abscess of the jaw and became definitely diabetic.

(with but few exceptions) and acetone is not likely to be found in the blood or urine. These few simple considerations help to differentiate the two conditions at the bedside. The final proof, of course, is to determine the blood sugar,\* plasma acetone and carbon dioxide, which indicate not only the presence but also the degree of either condition. If chemical study of the blood is impossible the first urine after the preliminary catheterization should be tested. If this is loaded with sugar then the presence of coma is established.

In coma the treatment demanded is the administration of insulin, saline solution by hypodermoclysis and glucose intravenously with other measures, such as enemas, heat to the body and gastric lavage. Coma should be treated in a hospital and not at home, for the responsibility is great and the procedure technical.

The treatment for insulin shock is carbohydrate by mouth if it can thus be given; if not, glucose solution should be injected intravenously. If this is impossible glucose should be given hypodermically.

In case of doubt as to whether the patient is suffering from coma or from insulin shock, glucose solution should be given intravenously (2 to 5 c.c. of 50 per cent glucose solution in sterile ampoules). If the condition is due to insulin shock the patient will recover within a few minutes; if coma is present no harm will have been done, and only five or six minutes will have been lost.

#### THE EVOLUTION OF DIABETES

To illustrate the factors under discussion I shall cite one case, that of a man fifty-eight years of

age, whom I saw first in 1926. At that time he had arthritis, obesity and chronic prostatitis, and later an abscess of the jaw. Two chronic infections in addition to obesity are conditions which might be considered as predisposing factors to diabetes. In 1926 the blood sugar was just slightly elevated (Chart 6) and the urine was sugar-free. This slight elevation of blood sugar was studied further a few days later by a glucose tolerance test, which showed the presence of mild diabetes. He was warned about his diet and for the next three years his condition was kept under control, as the subsequent sugar estimations in the blood and urine indicate. Then in 1931 he began to show a slight rise in the level of the fasting blood sugar with occasional glycosuria. These figures were not high, and at his age, sixty-three years, were not considered of great significance. However, in 1932 infection played the final part, and when the glucose tolerance test was repeated February 4, 1932, a definite diabetic curve was disclosed, and eight months later the fasting blood sugar was 300 mg. with heavy glycosuria.

A case such as this illustrates the gradual onset of diabetes, which, in its incipency, can be held in check, but with disregard to diet or superimposed infection the characteristic clinical picture emerges. There is no definite cure for diabetes, but much can be accomplished by way of prevention if the patient is willing to cooperate.

#### DISCUSSION

The family physician is the guardian of health and well-being of the families under his care. His duties and responsibilities are too great for any one person to cover with precision, for the time alone prevents his keeping up with the many details that devolve upon him. In this respect the specialist has a tremendous advantage, for he has restricted his activities to but one field and consequently has an unusual opportunity to know that field thoroughly in all its variations and complications. He has the facilities of laboratories which are very important in the treatment of diabetic patients. In contrasting the facilities of the specialist with the handicaps of the family physician one can but admire the tremendous amount of good the family physician does. True he makes mistakes, perhaps many of them, but so does the specialist. And there is more justification for the mistakes of the family physician. As time goes on the mistakes of the family physician will be materially reduced as he learns to lean upon his copractitioners who are specialists.

Much progress already has been made in this direction. Operations used to be performed on the dining room table, whereas now the family physician refers his patient to a competent, experienced surgeon, who has the necessary surgical facilities and equipment. The same thing is being done more and more in the special fields of internal medicine, for the specialist has the necessary



equipment and facilities for tiding a patient over a crisis that the general practitioner cannot possibly have.

I shall cite just one example that illustrates the importance of this type of medical service. During the last ten years I have treated thirty diabetic children in coma. Of these, four died, making a gross mortality of 13 per cent. Of these four, one died in the preinsulin era and two died one hour after admission to the hospital, having been in coma for four days. Death in these three cases was unpreventable. One child died on the second day, making the real mortality only 3.3 per cent. Among the diabetic children I have treated there were fourteen additional cases of coma. These patients were treated solely by the family physician at the time of crisis and thirteen of them died, making a mortality of 93 per cent. Facts such as these need no comment and demonstrate the importance of cooperation between the specialist and the family physician.

## POSTOPERATIVE ATELECTASIS\*

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Postoperative atelectasis or collapse of the lung has been and probably still is one of the most often overlooked and wrongly diagnosed conditions in medicine. The diagnosis of postoperative pneumonia, which is really a rare condition, or pulmonary infarction, is the diagnosis that is often made in this condition and as I will point out in more detail later, it is quite important from the standpoint of treatment and prognosis to differentiate these conditions.

The first accounts of atelectasis in the literature were those in 1829 by M. Louis who called it cornification of the lung. In 1850 W. T. Gardner gave a most complete and careful description of the condition, including the pathology, but nothing more was written on the subject until 1890, when William Pasteur again called attention to it. His cases occurred as postdiphtheritic complications and were due to paralysis of the diaphragm. In 1907 Sir James Barr reported the first case of postoperative atelectasis. From 1908 to 1914 Pasteur reported sixteen cases following 2,000 abdominal operations. Elliott and Dingley, in 1914, reported eleven cases after abdominal operations. During the world war Sir John Rose Bradford described atelectasis following chest injuries that did not penetrate the chest wall. In some of his reported cases the collapse occurred on the injured side and some on the uninjured side.

In 1921 Scrimger, who was the first one to describe this condition in American literature, reported seven cases of postoperative atelectasis which occurred in 540 consecutive operations. Four

of these seven cases followed appendectomies, two followed herniorrhaphies, and one followed a hemorrhoidectomy.

In 1925 Scott added four more cases, bringing the total number of cases reported up to that time to sixty-eight. In the same year Jackson and Lee showed a definite relationship between massive collapse and plugging of a bronchus by foreign bodies or secretions and showed that removal of these caused a gradual reinflation of the lung. Since that time numerous other cases have been observed and reported in the literature.

### ETIOLOGY

Like many other conditions that are not clearly understood, numerous theories for the cause of this condition have been brought forward and I will mention some of them here.

1. Pasteur believed it due secondarily to a collapse of the chest wall caused by a paralysis of the diaphragm and probably of the accessory respiratory muscles.

2. Elliott and Dingley produced a paralysis of the diaphragm and accessory respiratory muscles but got no atelectasis, which tended to disprove Pasteur's theory. They believed that atelectasis was due to an immobilization of the diaphragm associated with a bronchial obstruction, the alveolar air being absorbed by the blood. Jackson and Lee concurred in this but said bronchial obstruction alone would cause the condition.

3. Briscoe thought it due secondarily to an inflammatory process affecting the retroperitoneal portion of the diaphragm. This was said to disturb the function of the diaphragm and respiratory muscles on the affected side.

4. Bradford's opinion is that atelectasis is due to vagus stimulation affecting the constrictor mechanism of the bronchioles but has offered no proof for his belief.

5. There is also a view that the condition is due to a reflex spasm of the bronchioles caused by a vagus disturbance. This could account for contralateral collapse following chest injuries.

6. Another explanation of this condition is the so-called angioneurotic theory. According to this theory it is a condition similar to angioneurotic edema in other tissues as it comes on rather rapidly and often leaves in a like manner.

7. Vasomotor theory is that there is a blocking of the finer air passages due to a vasomotor disturbance.

8. Recently attempts have also been made to attribute it to an allergic phenomenon.

9. Faulkner says atelectasis is due to excess intrabronchial secretions and the influence of internal drainage on these secretions.

Experiments on dogs, however, show that three factors are necessary to produce atelectasis, namely:

\* Presented at the annual session of the Indiana State Medical Association at French Lick, September, 1933.

1. An intrabronchial content of a definite viscosity.
2. Abolition of the cough reflex.
3. Limitation of respiratory movement.

As yet no one theory has been generally accepted, but the consensus of opinion favors the bronchial obstruction theory of Elliott and Dingley, which has also been shown by the work of Coryllos and Birnbaum, Brunn and others, for the following reasons:

1. Examination of patients immediately postoperative and at intervals thereafter shows that atelectasis comes on after several hours have elapsed following an operation. This is an argument against a sudden production of atelectasis by means of a reflex nervous mechanism and shows that time must elapse during accumulation of mucus leading to bronchial obstruction.
2. Jackson and Lee have found mucous plugs in two cases at autopsy and also during life.
3. An atelectatic lung will become reinflated following bronchoscopic aspiration of mucus.
4. Atelectasis will reoccur following reaccumulation of mucus in the bronchial tree. One observer noticed this cycle seven times in one case.

#### PATHOLOGY

Normally a few pneumococci and streptococci may be isolated from a healthy human bronchus and also from the bronchi of dogs. The bronchial secretion from a collapsed lung, however, is heavily laden with pneumococci and if put in a bronchus of an animal will cause a rapidly fatal pneumonia. Some men, among them Coryllos and Birnbaum, are of the opinion that all cases of pneumonia begin as an atelectasis. It is difficult to know just what the condition of the lung is in the ordinary cases of atelectasis as they nearly always get well. In animals killed 24 hours after the onset of the condition the pleura is clean and glistening. The lung is not collapsed away from the chest wall as in pneumothorax but it is heavy, noncrepitant, and congested. It is also slightly smaller than normal.

Microscopic examination shows the alveoli to be collapsed. The lining cells are edematous and the blood vessels congested. Some of the alveoli contain red blood cells. When the condition is of a longer duration the findings are those of a bronchopneumonia due to infection from the bronchial secretion.

#### INCIDENCE

It is said that two to three per cent of all operated patients develop pulmonary complications and that one in every two hundred die of a pulmonary lesion.

According to World War statistics massive collapse follows five to ten per cent of all chest wounds and is almost constant in penetrating chest injuries. The collapse may be on the injured or uninjured side, the reason for which is not known.

Postoperative massive collapse is relatively infrequent while partial collapse is not uncommon. Pasteur reported massive collapse in .8 per cent of postoperative cases and Scrimger in 1.3 per cent. However, many of the partial collapse cases are overlooked and are found only after careful physical and x-ray examinations. Mastics, Spittler and McNamee state that atelectasis comprises about 70 per cent of all postoperative pulmonary complications. It occurs usually in the second, third, fourth, and fifth decades, forty per cent of the cases occurring in the third.

The condition is more frequent in men than women, in some series as high as three to one. One reason why women are less susceptible than men is because they are costal rather than abdominal breathers. The right lung is involved in 75 per cent of the cases and generally the right lower lobe because of the bronchial arrangement favoring drainage to this region.

#### SYMPTOMS

Eighty per cent of the cases develop in the first eighteen hours after an operation. It may be later of course, but a rapid onset shortly after an operation is one of the differentiating points from pneumonia which usually does not appear so soon. The severity of the symptoms depends on the amount of lung involved and may be so slight as to be overlooked. In one series of the cases reported, 10 per cent of the patients had no symptoms. There may be only an insidious onset of tachycardia or there may be a sudden onset with facial erythema, tightness and acute pain in the chest, dyspnea, tachypnea, sudden elevation of temperature, pulse and respiration, cough with or without expectoration, profuse diaphoresis, and cyanosis.

On physical examination the findings depend of course on the amount of lung involved and may be divided into two groups: First, those due to obstructing secretions in the bronchi; and, second, those due to disappearance of air in the lung distal to the plug producing an increased negative intrapleural pressure. The former give changes in percussion and auscultation depending whether or not air can communicate with part of the involved lung. Therefore, a coughing spell or a change in position may entirely change the findings in a very short time and a person examining the patient at intervals of an hour may have entirely different findings.

There is slight or no mobility of the diaphragm and chest wall on the involved side and there is a narrowing of the intercostal spaces. There may be all degrees of dullness on percussion, and breath sounds may be greatly or slightly decreased, bronchial or entirely absent. There may or may not be rales present. These symptoms are due to bronchial obstruction.

The main symptoms due to the above mentioned



increase in negative intrapleural pressure is mediastinal displacement which is manifested by the heart and trachea moving to the affected side and is one of the outstanding points in diagnosis. This cardiac displacement may account for much of the circulatory and respiratory embarrassment which many of these patients experience.

X-ray examination in a well marked case shows mediastinal displacement, elevation of the diaphragm, an increased density of the lung, and often a shrinkage in its size. Scattered, small, bronchial obstructions caused by thin secretions may give a patchy appearance similar to bronchopneumonia but with a mediastinal displacement, which bronchopneumonia does not have.

Unless complications arise there is an absence of the marked general symptoms present in the well developed pulmonary conditions, such as embolism, infarction, or pneumonia.

Summarizing, I would say the main points in diagnosis are: Rapid onset, after an operation, mediastinal displacement, and absence of marked general symptoms in most cases.

The duration and course of atelectasis is variable. It may end in any one of three ways, by crisis, lysis, or complications. If the ending is by crisis there is a sudden clearing up of the condition in a few hours or days after onset. The heart and mediastinum return to normal, but the diaphragm may remain elevated for a long time. The clinical symptoms rapidly disappear and the patient feels quite well. However, it often terminates by lysis and the condition gradually clears up. Complications are rare. They usually occur in the long drawn out cases and generally consist of a bronchopneumonia or lung abscess.

#### DIFFERENTIAL DIAGNOSIS

Atelectasis must be differentiated from pneumonia, pulmonary infarct, or embolism. The importance in differentiating these three conditions is in the treatment. In infarct of the lung the patient is to be kept quiet, while in atelectasis just the opposite is done, for the patient's position should be changed frequently. In pneumonia oxygen inhalations are often given and are beneficial, while this method of treatment in atelectasis is harmful since it encourages shallow respirations while it is deep breathing that is desired. However, if carbon-dioxide is added to the oxygen it is quite helpful in both conditions since it causes deep breathing. It is sometimes also necessary to differentiate this condition from a pneumothorax or fluid in the pleural cavity.

#### TREATMENT

As in most conditions treatment begins with prevention. Bronchial catarrh and oral sepsis should be cleared up before operation whenever possible. Atropine preoperative in cases where general anesthesia is used is good to give in small doses, but is really harmful in patients who have

purulent bronchitis since it tends to thicken the secretion and make it tenacious, thus favoring plug formation in the bronchi. An abundant but thin secretion is much better. Large doses of morphine should not be given preoperatively, as this tends to depress the respiratory center and thus causes shallow breathing. To quiet the patient before an operation sedatives are often more advisable than morphine.

During the operation if ether is given the anesthetist should prevent the accumulation of secretions in the mouth and throat. Carbon-dioxide during the operation and after it is beneficial, as it stimulates the respiratory center so that the patient breathes deeply. After abdominal operations the dressings should not be put on too tightly as this hinders breathing. Large doses of morphine or other respiratory depressants should not be given until the patient has fully regained consciousness. Immediate postoperative coughing and vomiting is good for the patient as it enables him to bring up any secretions in the bronchial tree, but if morphine is given early or in too large doses postoperatively it may prevent some of this. Abdominal distension should also be gotten rid of as soon as possible.

As soon as the patient regains consciousness it is the practice of most men to elevate the head of the bed, but a few keep the foot elevated for twenty-four hours, thus taking some of the pressure off the base of the lungs. The patient's position should be changed frequently and he should be made to take deep breathing exercises five minutes out of every hour for the first few days. This is quite important in patients who have had spinal anesthesia as it predisposes to atelectasis by limiting respiratory movements, and tends to cause a thicker sputum, because these patients usually are more quiet postoperatively.

After a case of atelectasis has developed an attempt should be made to get rid of the pulmonary secretions by postural drainage. The position a patient should be placed in depends on the part of the lung involved. If the right lower lobe is affected, the patient should be turned on the left side with the foot of the bed elevated. After fifteen or twenty minutes, he is turned to the right side for a few minutes. If the left lower lobe is affected the patient should be turned to the right side. If an upper lobe is involved, the head of the bed should be elevated and the patient turned to the opposite side, then after remaining in this position for about fifteen minutes, which is the usual time allowed for drainage of any lobe at one time, the patient should be put in the Trendelenburg position so that the secretion which has drained to the trachea may drain to the throat where it can be expectorated. When there is middle lobe involvement, the patient should be placed flat on his back with the foot of the bed raised. It is important that the patient be not allowed to remain in a given position too long or the secretion may

drain into the dependent portion of the lung and cause a plugging there.

Carbon-dioxide inhalations should be given to overcome shallow breathing, ten per cent carbon-dioxide in oxygen, five to ten minutes if necessary every hour, with the patient in the appropriate position for drainage. The patient should be encouraged to cough and expel the mucous plugs. If the secretions remain thick and tenacious, steam or creosote inhalations may be administered and potassium iodide or ammonium chloride given by mouth. If the condition does not clear up after these measures have been given a fair trial, bronchoscopic aspiration of the mucous plugs should be done. Where the clinical symptoms are marked and prolonged, some men advise artificial pneumothorax on the affected side in order to push the mediastinum back to its normal position as they believe many symptoms are due to vascular disturbances caused by this cardiac displacement.

Fortunately, most cases clear up and the mortality rate is very low unless there be a bilateral atelectasis or complications. Although the mortality rate is low the condition should be recognized and differentiated from other postoperative pulmonary conditions so that the proper treatment can be instituted and thus prevent the more fatal sequelae as pneumonia or lung abscess.

## THE DETERMINANTS OF KIDNEY FUNCTION\*

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In the theory and practice of medicine, probably one of the most practical difficulties is the role of the kidneys in nephritis. In spite of ingenious, laborious, and well controlled and confirmed investigations to elucidate the manner in which the kidney performs its function, little that is practical in etiology and prevention has been conveyed to our profession.

A. B. Macallum, in Cowdry's "Human Biology," says: "The kidney has made the vertebrata with all their range of development possible and controlled and stabilized the composition of the blood plasma, bathing cells and providing constancy in the primal concentration of each."

It is interesting to note that in the development of the renal system of higher vertebrates one deals not with successive stages, in the development of a single organ, but with developmental and regressive stages in a series of organs, each of which presents excretory tubules and a duct system. The final kidney has a double origin: The duct system developing from the mesonephric duct; the glandular tubular portion developing from the metanephrogenic tissue.

A comparative study of the morphology and function of the renal unit as it has evolved from the simplest to the more complex structure, and correlating these, is entertaining. In the invertebrata nothing resembling a glomerulus occurs, but as excretory organs there are various types of tubules with glandular epithelium.

In his studies of glomerular and aglomerular fish, Marshall presents evidence that the vertebrate kidney was primitively aglomerular and that it consisted of a series of tubules communicating with the coelom, the tubules opening either separately to the exterior or into a common duct. It postulated that the glomerulus developed after the tubules, and was evolved in some early fresh water cordate to enable the organism to excrete readily the large quantity of water which was absorbed along the osmotic gradient existing between the blood and its fresh water environment. This glomerulus represents simply an advantageous position of the blood vascular system to the already tubular system draining the early primitive coelom.

So long as the organism remained in fresh water or in intimate dependence on it, this excretory arrangement persisted, but with the secondary assumption of a marine habitat where the osmotic gradient was reversed and the water excretion reduced, or with the assumption of terrestrial life in which water conservation became a necessity, the organism no longer needed this primitive water excreting mechanism and could not longer use it economically. There was thus a need either to discard or reduce the glomeruli or to amend their primitive function by adding distally a more efficient mechanism for the reabsorption of water. The first process appears to be occurring in the fish, the birds, and reptiles while in the mammals on the other hand and possibly to some extent in the birds a further elaboration of the tubular portion—the addition of the loop of Henle—has permitted the reabsorption of water against the osmotic pressure of the metabolites and salts in the tubular urine. Consequently, the glomeruli has been incorporated into a filtration, reabsorption system which permits the excretion of excessive quantities of water.

In the most widely accepted theory of urine formation in mammals, it is suggested that the process begins with the glomerular filtration of a protein-free fluid from the plasma. The glomeruli are well adapted to carry out such a process of filtration.

The blood in the capillary tufts is only separated by two thin layers of cells (epithelial and endothelial) from the interior of the capsule.

There is evidence to suggest that the pressure in the glomeruli is usually high and about the same as the carotid blood pressure, 100-120 m.m. Hg. It must be remembered that the whole of this pressure is not available for purposes of filtration. It is opposed by the plasma proteins which exert

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an osmotic pressure of about 40 m.m. Hg. which tends to hold fluid back inside the blood vessels. The net filtering force is therefore blood-pressure minus protein plasma osmotic pressure, 120-40. In the Beaumont Foundation lectures 1929, Richards describes proof of this filtering force: "the ureter is ligated and a cannula inserted above and connected with a mercury manometer. The pressure in the ureter as recorded by the manometer gradually rises to a maximum of 80 m.m. and then remains stationary; in other words when the pressure in the ureter, consequently in the tubules and in the capsule is 40 m.m. lower than the supposedly glomerular pressure, the filtration of urine comes to an end." Now, if the plasma is greatly reduced by the injection of saline and the protein osmotic pressure reduced, filtration goes on till higher ureteric pressure is attained.

Richards also demonstrated that the flow of blood through the kidney probably has a more important bearing on the excretion of urine than the blood pressure. Extracts of the posterior lobe of the pituitary raise the blood-pressure, increase the blood flow through the kidney and thus increase the urinary output. Adrenalin raises the blood-pressure but constricts the renal vessels and so flow of urine is reduced. Thus a rise of blood-pressure increases the renal blood flow and glomerular filtration; a fall reduces these effects.

The glomerulus then may be considered in the nature of a filter, interposed between the blood plasma and the exterior. The protein-free plasma filtrate passes down the tubules and is elaborated into urine by the absorption of water and some of its constituents. This is not a purely physical process, as shown by a study of the freezing point of tubular urine and the blood by Kor'anyi. The freezing point is a measure of molecular concentration and therefore of the osmotic pressure of a solution. The freezing point of tubular urine is lower than the freezing point of the blood, so that the tubules consequently would have to exert a vital activity and do work to return water to the blood. The urine can never be concentrated beyond the point at which its osmotic pressure just balances the absorbing or functioning power of the renal cells.

Experiments with pituitrin suggest that it undoubtedly controls the daily normal output of urine and that it probably acts directly on the epithelium of the tubules, increasing the absorption of water. Dr. R. W. Gehres, my associate, has amply demonstrated to me the control of urinary output by the hypodermic administration of pituitrin.

If a person is given a salt-free diet, salt practically disappears from the urine; it is all reabsorbed from the tubular filtrate to maintain adequate concentration of salt in the blood. Caffein is now administered, and salt reappears in the increased flow of urine. It is suggested that caffein paralyzes reabsorption of salt by the tubules, more salt remains in the tubules, exerts an osmotic

pressure and interferes with reabsorption of water and diuresis occurs. This explains the diuretic action of caffein.

There is much controversy as to whether or not tubular epithelium secretes. In a personal communication from one of our most eminent pathologists he stated: "perhaps the tubular epithelium does secrete, but if it does, so does the epithelium of glomerulus; all changes that take place in the tubular epithelium take place in the glomerular epithelium."

With these two functions, the glomerulus diluting and the tubules concentrating the renal transudate, elaborating it into urine, perhaps the most conspicuous functional disturbances in nephritis are those connected with the excretion of water and its distribution within the body. The most obvious of these disturbances is the inability to concentrate solutes and its associate polyuria on the one hand and edema and oliguria on the other.

To this inability of the functionally damaged kidney to concentrate urine, Kor'anyi applied the term "hyposthenuria." By elaborate freezing point determination, Kor'anyi determined that the severely damaged kidney is not only unable to concentrate urine but cannot fabricate a dilute urine, thus becoming unable to compensate the hyposthenuria. Addis and Fishberg and Volhard consider inability to concentrate as the only true sign of renal insufficiency. The inability of the kidney to elaborate urine from the glomerular filtrate diminishes progressively as renal function decreases, the urine finally approaching in composition a simple filtrate of blood plasma with a specific gravity of 1010 or 1012.

During the earlier stage the renal insufficiency may be considered as compensated by the excretion of large volumes of dilute urine and the excretory needs of the body fulfilled; later the urinary volume cannot be increased to compensate for the hyposthenuria, there is a retention of waste products, compensation is broken.

While loss of diluting power may be due to renal disease, per se, its appearance in clinical conditions is far more commonly due to extra-renal factors, especially cardiac failure and edema. Heart failure or the edematous tendency with renal insufficiency then will affect both the diluting and the concentrating capacity—the picture of renal decompensation with the specific gravity fixed in the neighborhood of 1012, that of blood plasma.

The elaborate freezing point methods are not necessary to demonstrate variations in the concentrations of urine; the specific gravity is of sufficient accuracy. The Mosenthal test, the concentration test of Lashmet and Newberg are simple and within the range of the daily work of the average busy physician.

There are many concepts to explain the phenomena of hyposthenuria, the most popular of which is that a large portion of the glomeruli, destroyed, force the remainder to work harder and

more continuously, the filtrate traversing the relatively few tubules at such a rate as to impair absorption.

It is significant that the water content of the tissues of all vertebrates is approximately constant and close to 80 per cent. It is equally significant that the protein content of the tissues is essentially fixed and that the protein water ratio is remarkably constant and that in the composition of the body, water is the primary and central feature. All these facts suggest that the really fundamental, steady state in the composition of the body is its water content and perhaps the water content is maintained with reference to tissue proteins.

In the intercellular spaces a certain amount of fluid normally exists and when it accumulates in quantity it is called edema.

More than a century ago Christison spoke of the relation of edema to plasma protein deficit. The theory of hydremic plethora and the experiments showing the effects of sodium chloride in promoting edema completely altered clinical views until measurements of the blood volume by dye method by Linder, Stillman and Van Slyke proved that the edema of nephritis is not accompanied by hydremic plethora—in fact they showed that in most cases the blood volume is below rather than above normal.

In 1917 Epstein applied Starling's physiological studies to the theory of edema. Starling advanced the theory that exchange of fluid between the capillaries and the tissues was controlled by two opposing forces—the capillary (hydrostatic) pressure tending to force fluid out of the capillaries and the osmotic pressure of the plasma proteins to which the capillary walls are ordinarily impermeable tending to draw fluid into the blood stream. The practical application is that at the arterial end of the capillaries the hydrostatic pressure exceeds the protein osmotic pressure (the oncotic pressure) and fluids are thus forced into the interstitial spaces. As the blood flows to the venous end of the capillaries, the hydrostatic pressure steadily decreases finally falling below the oncotic pressure. At this point fluid returns to the vessels.

If the oncotic pressure is abnormally low, the tendency for fluids to escape is increased. If the hydrostatic pressure by any impediment to the venous return is increased, transudation of fluid from the vessels is accelerated. In nephritis associated with hypertension and arterial disease, edema when it occurs is usually referable to heart failure, and serum proteins may *not* be reduced below the normal. While in this condition edema without a deficit of serum proteins may be found, the converse absence of edema when proteins are greatly reduced is not encountered.

The serum proteins are thus of first importance in maintaining the osmotic equilibrium between the blood and the tissues and the cellular elements of the body.

Sodium makes up more than ninety per cent of the base of the blood, and since chloride is a vehicle for the metals, much of the sodium is in the form of sodium chloride. For some reason water and salt appear almost inseparable. Edema is not ascribed to the inability to excrete chloride; chloride lies in the tissues and is not available to the kidney in edema.

These facts give themselves readily to the determinations of the hydration of the body and lend to therapeutic manipulation, the addition of proteins to the diet and the withdrawal of salt.

One may gain the impression that edema fluid may be held only as intercellular fluid but Blackfan has shown that it may be held as intracellular fluid. This type is found in various organs, among them the brain.

He believes and has confirmed at autopsy that the syndrome we call uremia is misleading and that cerebral edema is the cause of the cerebral manifestations in nephritis. He showed that prompt relief of the cerebral symptoms and the hypertension could be obtained by the intravenous injection of about 10 c.c. of a 10 per cent solution of magnesium sulphate.

Formerly it was believed that in nephritis, because of inflammatory and degenerative conditions, the kidneys were incapable of excreting water, and the water soluble metabolites and of retaining within the circulation the proteins of the blood and that the clinical aspects of nephritis were due to the action of these retained substances; experimental and clinical observation disprove this.

Nephrectomized normal dogs do not die of uremia, nor do they develop edema. Just as in man, when through error, the functioning kidney is removed or as the result of renal catheterization or other manipulation, anuria results, the patient dies with low blood pressure and progressive weakness, not uremia. The old view imposes the concept of a kidney so damaged that it will no longer excrete water, but pass freely albumin and globulin.

It is known that the nephritic kidney, no matter how far progressed is the disease, will excrete available water, and that anuria and edema are not at all due to renal failure.

Just as there is a primary tissue or cellular priority on water, there is also the same with regard to the constituents of the blood. Blood chemistry, instead of a recitation of the degree of kidney impairment is an index of the tissue chemistry and is the level maintained in equilibrium osmotic and chemical with the tissues; when this is satisfied, the kidney excretes the excess.

While our knowledge of water metabolism and the behavior of the kidney in nephritis is far from satisfactory, we are rapidly learning from the martyrdom of research that many of the disturbances of water balance and metabolism are only remotely related to renal pathology.



Undoubtedly some of the distortions in the composition of the blood are merely expressions of compensatory reactions. In the theory and practice of medicine many compensatory reactions presenting symptoms as compensatory manifestations are interpreted as syndromes of disease rather than as compensatory processes.

## ETIOLOGICAL CONSIDERATION OF CANCER\*

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PRINCETON

The postulate that cancer is always precipitated by chronic irritation is tenable and probable.

The observation that cancer in man is on the increase is evidenced by the accumulation of statistics.

Cancer, if you will, is an excessive or perverted defensive process—a struggle for existence of the body through the struggle for existence of the individual cell.

The perpetuation of all living matter depends upon individual cell division—the reproduction of the unicellular organism. In the struggle for existence of the unicellular organism, nature depends on numbers—producing millions for the chance survival of a few. Reproduction—blind reproduction—is the defensive process whenever the existence of the cell is threatened.

Multicellular organisms, including man, are but a multiplication of unicellular organism as far as existence and defensive processes are concerned.

When tissue is traumatized, chemically or physically, there follows at the site of injury an anaplasia of the fixed cells, i. e., a more or less reversion of the cells to the more primitive type in which the reproductive activity predominates, as well as in influx of unicellular organisms, the lymph cells, and this in turn is followed by a metaplasia to fixed cells to form scar tissue. If the irritation is long continued or stressed by an especially irritating substance, such as tar, arsenic, certain bacteria, nematodes, or possibly by a specific substance—the so far elusive cause of cancer—the reparative regenerative cells become activated into the embryonal type, with no tendency to metaplasia to fixed cells, so that the reproductive activity predominates and there results blind, unlimited reproduction—cancer.

“Cancer may be the result of any condition that repeatedly stimulates cell proliferation until the proliferative activity dominates the life process of the cell which acquires an exaggerated habit of growth.”

Biologically, what we do see is that the urge to reproduce is an inherent property of every living cell, and that the reawakening or activating of this

dormant property of the fixed cells is to produce cancer.

At the site of irritation there always is a stage of cellular hyperplasia and proliferation, the so-called precancerous stage, and if the irritation is persistent the unicellular urge to reproduce may predominate. At this time the cause of the urge of the unicellular or embryonal cells to reproduce—always to reproduce—is as mysterious as the dynamics of life itself, but we do know that it has been a property of the cell for millions of years and that, given the environment, embryonal cells (the unicellular type of highly organized beings) will proliferate indefinitely.

In a vague way something is known of the chemistry and physics that is vital to maintain the biologic urge. Experimentally, in the test tube, the urge may be maintained indefinitely in various nutritive fluids, such as embryonic fluid or interstitial lymph and the rate of reproduction and other cell behavior modified by such substances as bone-marrow and calf liver digest.

In the Rockefeller Institute, a strain of fibroblasts obtained from the heart of a chick embryo has completed the twenty-first year of its life *in vitro* and is as active today as when first isolated. This demonstrates that tissue cells living *in vitro* transform the food stuffs of their medium into protoplasm and the twenty-one year old strain demonstrates also that the cells are potentially immortal. As the life span of the chicken is rarely more than ten years and certainly never twenty-one years, it may be considered as certain therefore that fibroblasts—the embryonal type of cell—will proliferate indefinitely.

“The strain has been found to respond readily to changes in the composition of the culture medium by a modification of its rate of proliferation. It also became evident that the activity of the fibroblasts does not depend on the amount of potential energy they contained at the beginning of their life but upon certain substances present in the medium.”

Cancer cells, like other types of embryonal cells, may be cultivated in the test tube, and as Carrel says, they may be considered as healthy cells. Strains have been isolated and cultivated for months *in vitro* with the malignancy unchanged; malignancy is a permanent property of the strain. Transplantation into animals after months of life *in vitro* produces typical cancer tumors at the site of injection or transplantation.

Jensen's mouse carcinoma is still being transplanted, thirty-two years after the removal from the mouse in which it started. The cells of this cancer now growing in laboratory mice are direct descendants of the cells of the original cancer mouse.

Carrel speculates “that the unlimited growth of cancer cells within the body may possibly be attributed to the ability of the cancer cells to maintain themselves upon the substances present in the

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media. The property itself probably depends upon the increased enzyme activity of the cells." Whether the increased enzyme activity of Carrel is simply an intensity of a biologic something present in all cells, or a dynamic something that has not been isolated, added to the cell that constitutes malignancy, is speculative.

Petrov says that "the basic cause of the growth of malignant tumors is not to be sought in the primary poor resistance of the stroma cells, but in the primary increase in energy and aggression of the parenchymal cells and that the deflections of the intracellular and intercellular metabolism form the basis of the pathogenesis." This he concludes because all cancers in the early stages are localized, are caused by local causes and local therapeutics tend to cure. In practically all cancers local chronic irritation can be demonstrated. By chronic irritation in man we mean from seven to thirty years.

Various local conditions such as embryonic dystopia, embryonic rests—incomplete fixed-cell either in normal or misplaced sites, chronic inflammation, the cell displacement caused by scars, disturbances of blood supply, nutrition, metabolism, with the consequential equilibrium disturbances in the organs, tissues and cell, constitutes local sites of lowered resistance to irritation and consequently to cancer.

The fact that cancer always appears at the point of irritation is evidence that cancer is essentially a local disease and not a constitutional disease with local manifestations.

Experimentally, long-continued irritation by tar may produce cancer on the skin, uterus, urinary bladder, stomach, and gall bladder and always at the point of irritation.

The assumption of any definite specific cause is not probable. Cancer is the result of chronic stimulation or irritation of tissue by non-specific agents, the susceptibility of which is determined by their hereditary background. We say hereditary background, because there is sufficient evidence of human familial cancer diathesis, and human familial cancer resistance, and sufficient experimental evidence in animals of cancer tendency inbreeding to cause any doubt.

On the other hand, evidence has been stressed that cancer is but a local manifestation of a constitutional dyscrasia.

DeRaadt believes that the employment of tar and arsenic, the omission of vitamin A, and even chronic irritation of a body region, are not necessary to produce cancer.

Deficiency of hydrochloric acid in the system has been blamed for neoplasms in all their multitudinous forms. Interesting, and not without foundation, is the assertion of Guy that the hydrochloric secretion may be completely suppressed by emotion and worry, and consequently, at least by inference, that cancer may be caused by worry, fatigue, failure and despair of our present civilization.

Adrenal insufficiency by a number of authors is blamed for the cancer diathesis.

Man, as the latest and highest acquisition of evolution, has more poorly differentiated and unstable cells as the end product of his ensemble and therefore a greater tendency to reversion of type in his (end) cells, than any other animal. He has more embryonal cell rests, both in situ and transplanted; and incidentally, he has more vestigial remnants.

Man is but 50,000 years removed from his cave dwelling and but a bit farther from the time he shed his hairy coat; the advent of consciousness and orientation is but recent. The rapidly acquired, highly developed nervous system does not allow him to rest in any environment long enough for his nascent adaptive cells to become stable; not long enough to meet the irritation of extremes of temperature, the caprices of the elements, the changes in food and water. He tries to adopt the environment before the environment can adopt him. He is the only animal that tries to adopt every nook of the earth. No one breed of his faithful companion, the dog, is able to follow him. No other animal is so omnivorous—not excepting his porcine friend.

He drinks, smokes, over-eats and frets; he interferes with nutrition and elimination. Always he insults, overburdens, bombards his integument, alimentary canal, kidneys, lungs—every organ of his body; he exposes his cells to mechanical, chemical, solar, thermal, and more recently roentgen and radium irritation.

Civilization diverted him from the simple foods found in nature and which he so long used in the preparation of media for his cells, and added synthetic foods, spices, alcohol, caffeine, nicotine, ptomaines, leucomaines, toxins, a crowded pharmacopoeia full of beautiful drugs and an endless array of nostrums.

These preparations, often heated and chilled to extremes, he offers his cells in great quantities, and at short intervals—always overstimulating and irritating.

The media are chronically stale through his interference with elimination. He insists upon living in an artificial atmosphere.

In his haste to develop his cerebrum, he neglected his pelvis, and childbirth is practically always a pathological process.

Incidentally, cancer of the stomach and the uterus are the highest in incidence.

The complexity of civilization forces him to specialize and there is an increase of professional cancers—chronic irritation due to tar, paraffin, oil, cotton, aniline, coal, lead, and x-ray.

It is not unreasonable to conclude that the more complex the civilization the greater the sources and variety of chronic irritation, therefore the greater the incidence of cancer.



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## DISCUSSION

VIRGIL McCARTY, M. D., Princeton: We are attempting to consider some of the etiological factors of a disease which, according to statistics, is now awarded second place in the cause of death. Vital statistics are notably inaccurate and unreliable, but if we believe them at all cancer has shown a definite increase in the last two or three decades. Were it possible to have post mortem records of all deaths it is highly probable that our statistics would be materially revised. In a study of the records of practically all autopsies performed in Germany for a period of one year (and that included only 5 per cent of all deaths) it was shown that the clinical diagnosis overlooked the presence of internal cancer in over 30 per cent of the cases. If this be a criterion of our own mistakes in diagnosis, and it probably is, we would indeed be alarmed at the prevalence of cancer.

The essayist has given us an interesting and comprehensive review of the present-day conception of the cause of this disease. We are told that to date to no one cause has been ascribed the all-important determining factor. It is, however, a well established fact that long continued chronic irritation plays an important part in producing changes in the tissues which the pathologist recognizes as cancer.

The role of hereditary influence is still a debatable question. Judging from the results of the studies of Maud Slye and others on thousands of mice we are led to believe that perhaps humans are born predestined to develop cancer. Although Miss Slye is able to produce cancer almost at will in certain strains of mice, it must be remembered that in studying cancer statistics in human families we get a very incomplete picture of hereditary tendencies. Humans do not mate according to any set rule or regulation. The families are usually small

as contrasted with the large number of offspring in animals. Accurate clinical records of cancer are hard to obtain in history-taking. However, it seems likely that certain families by reason of their ancestry may develop a higher percentage of cancers.

The speaker has given us a hint that perhaps there is some bio-chemical change in the cell which may alter the constitutional physiology in such a manner as to predispose to the development of malignancy. He mentions the theories of adrenal insufficiency, and the disturbance of the acid-base equilibrium with the accompanying hydrochloric acid deficiency which have been advanced.

There is some experimental evidence that the lack of hydrochloric acid may be of significance. DeRaadt conducted experiments on a series of ten normal, healthy, white mice by feeding them for a period of months on a diet which was distinctly alkaline in character, mainly, white bread, whole milk and potassium citrate. In six to nine months four mice developed cancer and died, and one animal developed cancer in eighteen months—altogether fifty per cent.

It has been estimated that the normal range of life of a mouse is about two years, or about 1/30 that of the human species. These figures would signify that if ten young men were nourished continuously on a strongly alkaline regime, four will have developed cancer in about twenty years, and another will live about forty-five years before developing cancer.

Tar is known to accelerate the production of cancer if it is applied locally as an irritating agent. It seems likely that since it is represented abundantly in many basic substances that it may exert an even stronger effect in producing an alkalosis in the body. A vitamin A diet is also said to predispose to the production of cancer. Its action may be described as producing an alkalosis.

Coincident with this report we learn from Schrupf and Pierron that cancer in Egypt is relatively rare, occurring only one-tenth as often as in Europe and America. They attempt to explain this by the fact that the soil in Egypt is very rich in magnesium and calcium. Magnesium is said to be a detoxicating agent against an excess of potassium. In this country commercial fertilizers containing potash are commonly employed, thus rendering the vegetables and other products from soil more alkaline in character. A high potato diet also gives an individual an excess of potassium. Our chief source of magnesium is from grain if eaten in the form of whole wheat bread. Our ordinary diet is noticeably poor in minerals, particularly in calcium and magnesium, thus robbing the body of substances which tend to maintain the acid-base equilibrium.

Should these observations be confirmed by others in sufficient numbers to be at all convincing, we should then seriously consider altering our diet in such a manner as to avoid an excess of alkaline food.

## DUTIES OF THE PROFESSION IN HEALTH EDUCATION\*

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"The public has a right to know certain things about itself. Of vast importance to every man or woman is his or her state of health. It affects his or her life expectancy and determines his or her ability to make plans for the future. Every plan that may be made can be utterly destroyed if health or life is lost."<sup>1</sup>

These words, written by Thurman B. Rice of your own state, will be found, in case you have not yet seen them, in the January issue of *THE JOURNAL* of the Indiana State Medical Association. They express briefly and forcefully the right of the lay public to ask questions about matters pertaining to health. Dr. Rice holds that this right is not debatable. I agree with him. What is debatable is how the public shall be taught about health, by whom it shall be taught, and how much it shall be taught.

A short time ago, a physician wrote to *Hygeia* in response to a letter suggesting that *Hygeia* on his waiting room table would be an excellent way to give his patients a better appreciation of matters relating to health and disease. He replied<sup>2</sup> that under no circumstances would he consider having such a magazine where his patients could get it. He had formerly kept a copy in his waiting room, and the result had been that patients had asked him questions which he did not wish to be bothered answering, and which he said were none of their business anyway. It is not difficult to understand his point of view. Letters constantly coming to my desk asking questions about health, make the most astounding claims to possession, by lay individuals, of knowledge which physicians do not have. Not only do ignorant persons offer to teach doctors how to cure any of the incurable diseases with "something to rub on the back," but they calmly state that their doctors appear to know nothing about a certain subject, whereas they have read in an article somewhere, and so on ad nauseum. Such letters are irritating; such patients must be even more irritating to one who is compelled to tolerate them in the flesh. Nor is this attitude confined to the ignorant and the unintelligent. Within the month a letter has come from a reference librarian in the state of Indiana, from which I quote as follows:

"One of our patrons has asked us for all material available in our library on rheumatism and arthritis. . . . Local physicians have not given this patient any help whatever, and as her means are limited, she is doing all that is possible to diagnose her own case and in some way cure her affliction."<sup>3</sup>

One cannot do less than sympathize with this patient who in desperation is groping for help. We

know nothing, of course, as to her condition, and whether or not she has had all the help which medical knowledge has made available for her. She is not to be blamed for seeking every means she can possibly imagine to procure relief from her suffering. What impresses me in this letter more than anything else is that the reference librarian, presumably a well educated person, is so obviously the victim of a complete misconception as to the possibility or likelihood that this patient, by reading, can do better for herself than her doctors have been able to do for her. We have in this one letter an example of the prevalence of at least four fallacies, namely: that intelligent self-diagnosis is possible, that self-treatment holds reasonable hope of relief, that lay persons can read medical literature with profit, and that persons with a good education (reference librarians for example) are necessarily intelligent about their health. The public is interested in health, especially when that health is lost, but its interest is not an intelligently guided interest.

Such letters, and I cite this one because it is peculiarly apropos, having come just recently from Indiana, are not uncommon. They are difficult to answer. The correct answer is quite obvious, but it would probably do neither the profession nor the patient any good. The inquirer was sent three articles on arthritis from *Hygeia*, the magazine which the doctor previously cited would not tolerate in his waiting room, with as tactful as possible a suggestion that the patient would find her attempts at self-diagnosis and self-treatment disappointing. If she does not persist in these efforts despite the warning, I shall be surprised. One letter will not suffice to change or even appreciably modify the deeply ingrained conviction of such persons that their own diagnosis can be made and their own treatment prescribed when competent physicians have failed because of the lack of available knowledge about a particular disease.

Granting that the public is entitled to information about its own health, it seems self-evident that the medical profession is obligated in the public interest to supply such knowledge. So also are health departments and public health leagues, tuberculosis associations and similar voluntary health organizations. In fact the proper functions of such organizations, as the best of them recognize, should be educational exclusively. In the field of health education, so-called, will also be found commercial organizations of various kinds supplying health information, some of it of the very highest type and some of the very lowest and most reprehensible. How is the layman to discriminate if his doctor does not help him? He is assailed on all sides with health education or what passes for health education. The utmost cunning is exercised by commercial exploiters of the health motif. Public health departments have not always been as scrupulous as might be desired in avoiding tie-ups with commercial exploiters, buying a temporary

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advantage in publicity at a price which included sacrifice of their own standing as disinterested purveyors of facts.

The doctor's duty is clear. How shall he proceed to discharge it? The first question that is usually raised is that of ethics. It is easy enough to answer. Health education is not advertising in itself. It can be misused so that it constitutes advertising, or it can be kept, as it ought to be kept, education purely. The choice is sufficiently plain. In every corner of this country, the medical profession is taking up, to a greater or lesser extent, the problem of health education.

In Volume I of the Proceedings of the American Medical Association<sup>4</sup> we find the record of the meeting held in Baltimore in May, 1848, and a swift survey would show the following evidences of unselfish interest on the part of the medical profession in the public health and welfare:

A committee of one from each state was suggested to memorialize the Congress and legislatures in favor of a law "requiring the vendors or manufacturers of patent medicines or secret nostrums to affix, in a conspicuous place upon the bottle, package, box or other thing containing the same, in English, the names of the articles contained in said medicine, with the quantity of each." It was laid on the table at that time, but it was the germ of an idea which is now very much alive, out of which grew the present policy of the Association, carried out through its Bureau of Investigation, Councils on Pharmacy and Chemistry, Physical Therapy, and Foods, and *THE JOURNAL*.

A "Committee on Sanitary Improvements" was proposed, and the instructions to this Committee were as follows: "... shall present an annual report on the general sanitary condition of our country, compared with that of other localities, embracing, as far as practicable, the existing arrangement of the Prisons, Hospitals, Educational Institutions, Manufacturing Establishments, &c., &c., in their relations to the laws of health and life. They shall also point out with discretionary minuteness the more obvious infringements of nature's code of health generally permitted by the authorities of cities and densely populated districts, and their influence on human viability; including any other information tending to the increased valuation of human life." This was proposed as an amendment to the constitution. What an order for a modern department of public health!

The following resolution was adopted:

"Resolved: That the Committee on Hygiene be requested to direct their attention to the following subjects:

"First:—What is the influence likely to be produced by the extensive introduction of tea and coffee into the diet of persons under the age of puberty?

"Second:—What is the influence of the substitution of the luxuries, tea and coffee, as food, upon the health of the laboring classes?"

Such instructions might well be given to modern students of nutrition.

They were still in the dark about the cause of malaria; the identity or distinctiveness of typhus and typhoid fevers were under discussion; ether and chloroform were still new and were the subject of an extensive committee report; Pasteur, Koch and Lister, of course, were still in the future. But these American doctors, in convention assembled, were thinking and talking about the public health, and studying it. We have since been treated, upon occasion, to the spectacle of persons talking about the public health without pausing to think or study.

In the report of the Committee on Hygiene from the Medical Department of the National Institute, two important obstacles were recognized, namely: the general apathy existing, even among medical men, on the subject of hygiene, and second, the favorable opinions entertained by almost every one addressed by the committees, of the healthiness of his own particular locality. But, and here I quote, "The Committee . . . have had the gratification to witness the first of these causes"—the apathy among physicians—"yielding to an exceeding solicitude on the part of the members of the medical profession to discuss and develop this question, so that at the present hour there is scarcely a medical journal, society or well educated man, who is not fully aroused to its importance. For much of this newly inspired zeal, they are doubtless indebted to the preliminary efforts of the American Medical Association, which has thus exhibited in its very inception, the great advantages which are likely to flow from its continuance . . . that under its auspices the sanitary condition of the union may be fully developed, human life prolonged, and the desolations of disease curtailed."<sup>4</sup>

Such fascinating browsing in old records might be pursued at considerable length, but enough has been cited to illustrate the point. The duty of the doctor to educate the public was recognized early. In subsequent years doctors initiated or supported, either by their organized efforts or through individual influence, many if not most of the public health movements which have contributed so heavily to the maintenance of that great paradox of the depression, the low death rate which continues even into the fifth year of generalized unemployment and distress. But let us look at the situation today.

While doctors initiated and supported many of the public health movements which, like a certain experiment, are noble in purpose, they did not exercise sufficient vigilance, in many instances, to keep the development of these projects in line with the best interests of the community. There have been too many instances where short-cuts to an admittedly desirable goal have been adopted in the hurry to accomplish spectacular results over night. The immediate objective has usually been attained, but sometimes the by-effects have not been all that could have been desired. Communities have built

up, in easy times, expensive forms of public health work which ought to have been done by the family doctor, while at the same time, in some instances, they have neglected the fundamentals of the health program, such as sanitation, water and milk supply protection, vital and morbidity statistics, and health education.

When tax revenues began to shrink, political conceptions of economy could not produce any more constructive expedient, in many instances, than horizontal salary or general budget reductions, without discrimination. In other cases we have seen the sacrifice of the health activities which had least vociferous popular support, usually those which did not obviously give something for nothing. Development of certain types of public health work in which free medical service was rendered without any economic discrimination, brought about the spectacle of babies from families comfortably well off, arriving in state by automobile at a free clinic supported by a community chest which drew its revenue from check-offs deducted from the pay of workers scarcely able to keep their own families in reasonable comfort. Some of these clinics have had free service or service for a nominal sum from the doctors in the community.

Such economic miscarriages do not serve the best interests of the community, entirely aside from the injustice they may do to the individuals who are contributing directly or indirectly to the discharge of obligations toward children whose parents ought to shoulder that obligation themselves. The reason advanced for the continuance of such projects has been that they are educational. So they are, and so are the schools educational. But we do not expect an individual to go to school without graduation all his life, and there seems no good reason why a mother with ordinary intelligence and economically above the indigence level should expect to attend a baby clinic free forever. With her first baby, and for a reasonable length of time, her admittance may be defended on the grounds that she needs to be educated by demonstration, but after that, she should be referred gently but firmly to her family doctor. Better still, if her family doctor has shown her, through his cooperative and sympathetic attitude and his willingness to enlighten her about matters which trouble her, that his advice and guidance in the care of her baby is to be preferred to that of any clinic!

The doctors have not been blameless in allowing an unwholesome tendency to gain ground in public health work. They have not only allowed it to grow, but too often have encouraged it. In numerous instances they have indifferently advised their patients to get vaccinated at the health department, or go down there for a Schick test or a tuberculin test. Naturally the health officer rendered the service. He must continue to render it if the profession does not do so, for the public must and will have preventive medicine.

A quick look through the assembled material in my office shows the following high lights in the field of medical participation in public health work, including health education: the Wayne County Medical Society-Detroit Health Department-Kellogg Foundation Plan, making the physician a health worker in his own office; the public health plan of the New Jersey State Medical Society; a description of cooperation between the State Health Department and the State Medical Society in California; cooperative plans for immunization work between health departments and the medical profession in Santa Clara County, California, and certain of its municipalities; health education in paid advertising space by the Berkshire District (Mass.) Medical Society; another project of the same character in Duvall County, Florida; the voluntary service of the Pennsylvania Medical Society in connection with determining the status of malnutrition in children; the attack of the Philadelphia County Medical Society and cooperating organizations on appendicitis and on the problems of sight conservation and immunization; close cooperation between official and voluntary health agencies and the Monroe County (N. Y.) Medical Society; Jefferson County (Wisconsin) Medical Society's attack on the problem of crippled boys and girls and the state-wide effort along the same line by the State Medical Society of Illinois; a goitre survey and preventive measures in Wood County (Wis.) made possible by the county medical society; a sex education project by the Medical Society which drew warm editorial commendation from the daily press of Santa Cruz County (Arizona); a study of malnutrition in children by the Wyoming Medical Society; close cooperation between Allegheny County Medical Society (Pittsburgh) and the general Health Council of that city; an effort by the Boston Health Department and the Suffolk District Medical Society to refer new babies back to the family doctors for health supervision and diphtheria immunization; school health examinations by the family doctor with health department cooperation in the Five Counties of Greater New York and in San Francisco; an exhaustive study of the public health situation by the Medical Society of the State of Michigan with recommendations for its strengthening and improvement; the Indiana reorganization of the State Board of Health; diphtheria immunization and smallpox vaccination project by Milwaukee County Medical Society; cancer studies by numerous State Medical Societies, and the maintenance of speaker's bureaus, radio broadcast programs, and press releases for the information of the lay public.<sup>5</sup> Added to this, of course, is the constant vigilance of the profession with respect to legislation on public health matters, in which the interest of the public is always held paramount. *Hygeia*, the Health Magazine, and the information supplied the public through various bureaus and councils at Chicago, as well as an extensive radio program and cooperative support



of local activities with pamphlets and exhibits, represent the contribution of the profession on a national scale. Finally, let it be noted that these activities of the profession have been paid for by the profession, not by funds raised from taxation or popular subscription. The medical profession has given the most sincere evidence of its appreciation of a duty to the public by discharging that duty at its own expense, besides giving liberally of time and money to worthy health movements outside its own ranks.

Two points seem to be clear: that the public desires and is entitled to information about its health; and that the medical profession is best qualified to transmit this information to the public through such channels as may be proper, including properly organized and functioning public health departments and organizations interested in health promotion, with whom cordial cooperation should be maintained so long as they pursue a policy which is in the public interest.

This is not the time to discuss technique. Plans must be fitted to local conditions; even state-wide plans must deal largely with principles, not details. It has been my purpose merely to lay before you as emphatically as possible the proposition that public instruction in health is among the most important duties which challenge the medical profession today.

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### THE SPIRIT THAT SHOULD EXIST AMONG PHYSICIANS\*

G. H. KAMMAN, M. D.  
SEYMOUR

To most of us it is not given to be real trail-blazers in the art and science of medicine and surgery; most of us are just plain men in the rank and file of the profession. This fact should not discourage us for our position is nevertheless an honorable one, and we have all the opportunity that we need to study human ailments and to do good to our fellow-men.

For many years the thought has been in my mind that the officers of the various medical organizations should do more to promote a better spirit among the members of the profession. This is such an important subject that our state and national organizations adopted a code of ethics from the very beginning. Hippocrates, the father of medicine, stressed this necessity in his well-known

oath. A united profession is needed as much, and perhaps more, now than at any time in the past.

To be truly respected by our fellow-men and our patients we must respect each other. In union there is strength. What, then, is the proper spirit that should exist among fellow physicians? Let it be: First, a spirit of mutual esteem; second, a spirit of helpfulness; and, third, a spirit of helpfulness to our fellow-man.

Physicians belong to one of the three great professions, known for short as the Lits, the Laws, and the Medics. The respective members of these professions have many things in common, and they therefore group themselves into organized bodies for their mutual benefits. We have such organizations so that we may present a united front to fight disease and other shortcomings of mankind. There is no law compelling us to belong to organized medicine, and no punitive measures can be invoked to punish non-members. We must seek other reasons for the existence of medical societies. Mutual esteem ranks high in the successful operation of societies having for their purpose the social and scientific advancement of their members. Politics may make strange bedfellows, and so may business, but motives for organized medicine must be more noble.

Egotism and aloofness may blind an otherwise learned and useful person. There is some good in everybody, and esteem begets esteem in others. We listen more attentively and learn more from those whom we respect. Harsh criticism and mistrust of our fellow physician is much tempered and often fades away when we really get acquainted with him and cultivate his fellowship.

Jealousy is an evil trait of character that has caused untold wrong and harm among professional and business men of all times. We never will get entirely away from it, but we should make a concerted effort to limit its baneful effects.

The more honorable the profession is within itself, the more will it be respected by the public, and the more capable and useful will it be in the prevention and cure of disease, and in the prolonging and in the adding to the comforts of life. If we will apply the Golden Rule in dealing with our fellow physician, we will profit by it.

#### SPIRIT OF HELPFULNESS

If we recognize the value of mutual esteem and cultivate such a spirit, it will logically follow that we will be helpful to each other. We must be in active competition with each other, but we must also keep in mind that our fellow practitioner is justly entitled to his share of practice.

We can improve ourselves if we will attend medical society meetings and take an active part in them. Almost without exception it may be said that great physicians of all times have grouped themselves into scientific bodies because they realized the value of such an association to themselves. If you belong to any society in a perfunctory

\* President's address presented at the Fourth District Medical Society, May 17, 1933, at Seymour.

manner, paying your dues and never attending meetings, it is logical that you will get but little benefit, for it is with this as with many other things—you get out of it what you put into it. The member who seldom attends and never takes an active part is not playing fair with himself or his fellow-member. Experience proves that those physicians who attend and who take an active part in medical societies become more broad-minded and better doctors. Life insurance companies and our courts of law recognize the value of such membership.

The society can be helpful in bettering the moral character of its members. Let me cite a case in point: Some thirty-five years ago a young physician whom I had known all my life acquired the drink habit. He became utterly ruined, financially and morally. Admonitions of his wife, his family, and his friends availed nothing. At one of the meetings of the county society, the members decided to call at this physician's home in a body and to plead with him to cease drinking and to improve his moral character, and this procedure so impressed the young physician that he did stop drinking, reformed, and became a successful and beloved physician.

The spirit of helpfulness of physicians in sickness among themselves and in their families is worthy of the best of traditions. It is an asset of no small value. Widows and orphans of our physicians never are in want of medical care, and that, too, without money and without price. This is as fine a spirit as can be found in any profession, class or kind of people. This spirit knows no bounds in society, creed, or color. Such a spirit should pervade in all our dealings and society activities.

Cooperation makes for success in any work and brings with it joy and satisfaction. We cannot all have large and lucrative practices, but if each physician gets his share ethically and decently, we should be satisfied. If jealousy prevents members from meeting each other face to face in consultation and in society work, something is radically wrong.

#### HELPING OUR FELLOW-MAN

Our societies are urged to enlighten and direct public opinion in regard to problems of state medicine. In doing this, we help our fellow-man in lessening the cost of medical care and in adding years and comforts to his life. Cooperation is essential to make this work effective. The danger of state medicine was never more imminent than it is at present.

We are our brother's keeper insofar as health concerns our patients and the public. This is a duty which we should assume zealously; we should not let so-called idealists, philanthropists, scientists, cultists, or even the government take the lead. There is no getting away from the fact that a different relation exists now between the physician on one side and the patient on the other than did

exist some forty or fifty, or even twenty years ago. Instruction in the laws of health and sanitation beginning even in our elementary schools and extending all the way through the colleges and universities has borne its fruits; we physicians should not be unmindful of it. To the physicians of the older generation and to those about to retire this changed relation may not seem so obvious and so important but nevertheless it is here.

This phase of medical economics should be carefully studied by our leaders in medicine and discussed in all our state and national meetings. In helping to solve this problem we are helping the medical profession. Let us work with our sanitarians, sanitary engineers, and all the boards of health to enact and enforce such sanitary and health laws as are best for the common good of both the profession and the public.

We can help our patients to keep down the costs of medical care if we advise them properly. Many of the common ailments do not need hospitalization. Patients should be advised that they must be satisfied with such hospital accommodations as they can pay for, and such laboratory work as is urgently needed. If the medical fee remains small, most patients will make an attempt to pay it. If the patient demands and gets hospitalization and all the laboratory work that may be done in such case, the bill may become so large that no attempt will be made to pay any of it. In such instances the physician often loses his fee and the hospital cost is saddled upon the public. Frequently it is said that physicians are poor collectors and poor business men, which should not be so; however, worthy charity should at all times be duly considered, and I have not yet seen a physician who was unwilling to do his share of it.

We are members of a great profession, perhaps the greatest on earth. Our opportunities to do good for our fellow-men are almost unlimited. Great responsibilities are placed upon us and great confidence is reposed in us. It goes without saying that we should be men of intelligence, noble in character, with high ideals and plenty of good common sense; in no other way can we merit the confidence and trust that our patients repose in us when they put their lives into our hands.

Medicine is not a fixed science. There is a never-ending opportunity for the physician to improve ways and means of alleviating human ailments. Many years have been added to the span of human life in the last four or five decades. We must remain students as long as we practice. We must meet new conditions with new remedies, or with new applications of those that we have. Be conservatively progressive, and optimistic at all times if possible.

The future of preventive and curative medicine is bright, but the economic side of it seems to be in a state of transition, and we should be careful to guard, guide, and direct it into channels fitting into present conditions and times.



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MARCH, 1934

## EDITORIALS

### SCARLET FEVER TOXIN

At a recent meeting of the American Public Health Association, Drs. O. B. Nesbit and Susie Thompson, of Gary, presented a report covering their work in the schools of that city, where they have administered about 50,000 doses of scarlet fever toxin over a period of ten years. We know of no other report covering anything like so many cases, hence we deem the matter worthy of the attention of the medical profession.

There has been registered considerable objection to scarlet fever immunization, this being chiefly based on the reactions that have been rather commonly reported, following the administration of the toxin. One of our Indiana men who has long been engaged in health work writes, "In reference to scarlet fever immunization I must say that I am not convinced that it is a good thing to go into except under very special conditions." He then goes into a discussion of these conditions, stating that most of them exist in Gary; that there they have full-time school physicians who have had enormous experience in this work. Further, diphtheria immunization had been carried out in the Gary schools long before scarlet fever immunization was started, hence the school patrons had become educated to immunization programs.

Drs. Nesbit and Thompson make no reservations in their statement that "scarlet fever toxin is a safe immunizing agent and that it pays." A good many other writers and observers disagree with this, to the extent that they have not as yet given their unqualified approval to wholesale immunizations. On the other hand, Dr. A. T. McCormick, Secretary of the Kentucky State Board of Health, in a conversation with the writer some little while

ago, stated that they were recommending its use in Kentucky and were inclined to be quite enthusiastic about it. It seems that during a scarlet fever epidemic in Berea College they had the Drs. Dick come down and assist in the control of the epidemic. Dr. McCormick assures us that the results of the Dick program, as carried out in this instance, was just about the last word in efficient control of a serious situation. In a large institution for homeless children the medical director quite some time ago began immunizations against scarlet fever and he, too, is a rather ardent supporter of the program. In the Gary report, the writers state that the death rate from scarlet fever is never high, except in epidemics of the malignant type. Gary had such an experience in 1917 when there were 11 deaths in 191 reported cases. In Gary, the death rate in 1922 was 3.5; in 1932 it was 0.9, notwithstanding a reduction in the quarantine period, in 1930, from 42 days to 21 days. (The quarantine period is an important factor in such a discussion as the present, since it is a much discussed problem by those engaged in health work.)

It is of interest, in these days of quibbling over the specter of "State Medicine," to note that the immunization program was instituted in the Gary school system *at the express wish of the Gary physicians*. After eighteen months they asked that the work be continued. (It has recently been requested that this work be turned back to the local medical profession, on the grounds that the present system is a form of state medicine.)

Group testing is, of course, preferable to individual immunizations, for many reasons; it can be carried on during school hours with little or no interference with class work; it also assures fresher materials with which to carry on the work. (Gary schools long ago adopted the platoon system of attendance.)

The writers go into detail as to the technique employed, in both the testing and the immunization, carefully explaining their method of interpretation of the various reactions. For the immunizations they use five doses in all positive cases, gradually increasing the dosage from 500 to 80,000 skin test doses, the "shots" being given at intervals of one week.

Anyone who is at all interested in the subject wants to know about reactions to the toxin. It would seem that the authors should be able to give pretty definite information in this regard, with an experience of 49,165 doses of scarlet fever anti-toxin, 20,278 primary Dick tests and 12,713 Dick retests given. (In passing, it is interesting to note that in all this work they have had not one needle infection.) The reactions varied from local redness, swelling and induration at the site of the injection, to fever, nausea, vomiting, joint stiffness, general malaise, and an occasional scarlatinaform rash. In 1,334 doses given in four school centers, in the fall of 1931, there were 153 reactions with 150 days of illness in that group.

In this same group there were four cases that refused to complete the series, three of whom contracted scarlet fever, after having had but one dose. One child missed a week of school due to joint stiffness. However, it was found that school time lost from reactions was considerably less than that from scarlet fever.

A tabulation of the readings of the Dick tests afford some worth while information. Fifty-four per cent of the readings were found positive, in a group of 18,980 readings. A check of those having received the full five doses showed 91 per cent to be negative. In another and smaller group, a test after five years showed 81 per cent were still immune. An interesting and informative statement follows: "In one family the mother contracted scarlet fever. Of the five children living with her, all of whom had been immunized, none became ill with scarlet fever. Three of these had had five doses and two had had ten doses of scarlet fever toxin. All had negative retests. A great number of similar experiences have taken place in Gary during the past nine years."

The conclusions of the writers are very well formulated, we believe; in fact, two physicians who have had such an extensive and unusual experience in immunization should be able to draw worthwhile conclusions. The proper reading of the test reactions they deem of major importance; the prevention of urticaria, a simple procedure in their hands, is of course recommended. Finally, the re-checking of cases is regarded as most important in any program of immunization.

As we have said, the question of scarlet fever immunization is a most important one; it is a big question; there can be no doubt as to its efficacy in the Gary school city, principally due to the fact that conditions there are such that it is almost an ideal place for such a long-continued study of the problem. It is to be hoped that Drs. Nesbit and Thompson may continue to give us regular reports on their work in this field.

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#### AN INDIANA HEALTH MENACE

In a recent report presented to the state health department by L. C. Guepel, Chief Sanitary Engineer, and M. L. Lang, Chief of the Division of Chemistry, attention is called to the fact that several Indiana cities have failed to take proper steps toward a solution of their water supply and sewage problems, as they were ordered to do some time ago by the Division of Public Health. These cities seem to have failed to sense the grave importance of immediate action.

To one who has been rather intimately acquainted with Indiana creeks, rivers, and lakes for more than a half century, the pronouncement of the health authorities comes as no surprise. From the time we were big enough to manage a fishing outfit consisting of the classic bent pin, piece of wrapping twine, and a willow shoot, we have been

a most ardent disciple of Izaak Walton. In this pursuit we have, in former years, traversed a great portion of our state in seeking the finny tribe. So it is with the most poignant regret that we now visit our former haunts only to learn that for many years past there has been little or no fishing because of stream pollution. Years ago our favorite little stream, the North Fork of Wild Cat Creek, teemed with fish, and the wily black bass seemed to delight in making its home in those waters. We recall that various industrial plants, as far away as Kokomo, began dumping their untreated wastes into the stream, and in a short time the fish population began to diminish. The late Dr. John N. Hurty, then secretary of the Indiana State Board of Health, inaugurated a campaign against such pollutions, notably those from strawboard plants, and in many instances there was a noticeable improvement.

While the effect of pollution on fishing grounds is greatly regretted, it is a minor consideration; the chief objection, of course, is to the menace to public health. We mentioned the fish matter because of the observation that public waters in which fish cannot exist surely do not offer many advantages to the human race. Some few months ago the Indianapolis *Times* ran a very well prepared series of articles on stream pollution and called attention to the deplorable condition of Indiana waters. Just what this had to do with the present agitation we do not know, but we do accord the *Times* full praise for having brought so serious a matter to the attention of the reading public.

Some few months ago an official of our state health department, in addressing the Lake County Medical Society, prefaced his remarks with the statement, "You folks are living on the shores of the greatest body of pollution in the country!" He referred, of course, to the southern end of Lake Michigan. For more than a century have the denizens of the great Calumet region discharged practically all their sewage into Lake Michigan. With the reversal of current in the Chicago river much of this menace was removed (rather transferred to another part of the country) but even yet the sewage from a most densely populated area continues to find its way into Lake Michigan, the same lake, by the way, from which some four millions of residents draw their drinking water. Added to this health hazard is the industrial waste from one of the largest manufacturing areas in the country.

Two decades ago we enjoyed most excellent fishing in Lake Michigan and in the Grand and Little Calumet rivers; one who dared announce that he had had a successful fishing expedition in any of these local waters at the present time would at once be accused of at least partial inebriety. Again we say, water in which fish cannot live is hardly to be considered as safe water for domestic purposes.



In the Hammond area exists a worse condition, if possible. In the city proper the sewage from a large population is pumped directly into the bed of the Grand Calumet River, this sewage being of the raw variety. In recent years there has been little or no current in this stream, hence the added raw sewage has made of this once beautiful stream an enormous, open cesspool. So intolerable have become conditions that at least one Hammond citizen living along the stream opposite the pumping station has brought suit against the city because of the stench arising from this cesspool.

In a central Indiana city, only a few years ago, there were threats of a suit of similar nature and the city officials found it advisable at once to begin the installation of a sewage treatment plant which is now in successful operation. Almost innumerable examples might be cited as to similar conditions in many sections of Indiana; conditions are becoming more and more intolerable and it is high time that the remedy be applied, lest we find ourselves in the midst of an epidemic of sickness wholly due to insanitary conditions. We spend almost fabulous sums on public buildings, public parks, and playgrounds, not forgetting to make convenient a golf course or two; yet we go on and on, polluting our streams and lakes, making almost no provisions for adequate sewage disposal and a pure water supply.

Proper sewage disposal is possible in any community and at a reasonable cost. Why continue to flirt with pestilence and disaster?

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#### MEDICAL SOCIETIES, DELUXE

The headquarters office recently received a letter from the secretary of one of our active county societies in which it was stated that he would like our opinion concerning the formation of "academies" of medicine in communities in which there already exists a going county society. He went on to say that it was his understanding that the proposed academy would bring to the community, each month, a nationally known physician to address the members. It seems that this community already has, in addition to the county society, a physicians' luncheon club and another club, membership in which seems to be of the limited variety; in fact, there seems to be criticism to the effect that its members hold themselves aloof from the garden variety of practitioners. This results in many of the local doctors feeling themselves aggrieved over the situation.

There is nothing new in the complaint which we have at hand. For many years we have heard similar complaints from various sections of Indiana, usually from the larger cities. We recall an instance in which it was reported that members of a proposed exclusive medical society were required to appear at the session in at least semi-formal attire. (We do not know that this rule was carried out to the letter.) We have had a

little experience in so-called exclusive organizations; years ago in our community we were a party to the organization of what was at first termed a study club, meeting weekly. From a membership of three it grew to almost a score in a very short time. Election to membership was had only after careful consideration and in a very short time the word was bruited about that this was a bunch of "high brows." From that moment the organization, now called an academy of medicine, began to wane, and in a few months it had disappeared. That we have too many medical societies is fast becoming an evident fact; what with membership in one's county society, a staff membership in one or more hospitals, and with membership in one or more medical societies one finds himself put to it even to attend them all, to say nothing of taking an active interest therein.

In the letter referred to, the matter of having a nationally known speaker each month seems to be the goal of the proposed academy; why not have this group of speakers before the county society? During the past year one of our larger societies tried this plan, bringing some six or eight of the better known men of the country before it; the result was that attendance at once leaped to new heights and more interest was manifested than ever before in the history of the society. At the annual meeting, for example, the attendance was something like 95% of the entire membership.

Medical men are but human, and it is very natural that those not invited to sign up with these new organizations of the exclusive type soon lose interest in the county society. We have often referred to the fact that the county society, after all, is the backbone of organized medicine. No matter how many other medical organizations there may be in a county, if the county society is not functioning there will be a corresponding degree of lack of interest in the other organizations.

Again, too often the fault lies with the active heads, or those that should be active, of these county societies. We have seen county societies carry on exceedingly well for a period of years, then suddenly take a slump; even a casual analysis of the situation will show that the reason is a failure on the part of the officers.

There are instances, of course, when a special society might seem to be advisable in some of the larger communities, to fill a special need; for example, if a group of medical men wish to pursue some of the less popular phases of medicine, say the philosophies of the profession, it might be well for them to organize into a special group, but for the most of us, if we will but give our entire attention to the county society there will soon be no need for a special society; indeed, there will be no demand for one.

We are for the county medical society first, last, and all the time; again we say, if this society is properly officered there will be little occasion for competing societies.

### LICENSED CHIROPRACTORS

Not long after the licensing of the drugless healers of Indiana in 1927 many of them proceeded to engage in various methods not generally recognized as pertaining to their particular cult; in fact, a great number practiced about everything other than that for which they were presumed to be licensed. One chap, sometime legislative agent for the state chiropractors association, organized a "group practice" scheme, taking it into various of the larger cities of the state. These folks get out a "Health Paper" of some four pages, on occasion, advertise in the local newspapers, and in various other ways seek to attract attention to their wares. In no instance do they set forth that they are chiropractors; they call themselves "doctors, licensed by the State of Indiana."

The logical method of handling this situation is, of course, through the Indiana State Board of Medical Registration and Examination, but it takes time and it takes money to prepare a case for prosecution and this Board has but little of either of these commodities; the medical practice act of Indiana clearly sets forth the machinery by which the law may be enforced but fails to supply the sinews of war; hence but little has been done to stop the many abuses that exist in these quarters. We recall that in our experience as a Board member, by dint of economy we gathered a reserve fund of a few thousands of dollars, hoping that in due time we would have enough to carry on a campaign of medical law enforcement. When this fund had approached the ten thousand dollar mark, along came a new regulation by our sovereign state, appropriating this money to the general fund of the state, and that was that. Since that time the Board has been lucky indeed if it is able to get enough money to carry on routine matters.

There is a crying need for regulation of many of these drugless healers; judging from reports coming to us, some of them are doing about everything but surgery and obstetrics. The prescribing of drugs is no worry to some of these folks. Current report, last summer, was to the effect that a drugless operator in northern Indiana was doing a "land office" business in treating hay fever and kindred ailments, and using drugs promiscuously. About the only difference between his plan of operation and that of the regularly licensed physician was that he did not write prescriptions; he evaded that responsibility by telling the patient what to buy at the drug store.

A few days ago we read a report of the finding of a California Superior Court Judge in a case where several chiropractors had been arrested for going outside their bailiwick in the management of patients. The judge is reported to have said, "They are practicing, and are holding themselves out to the public as practicing certain modes of treating the sick or afflicted, termed ophthalmology, nasal therapy, otology, intestinal flushing, pharyngology, laryngology, genito-urinary therapy, proc-

tology, iridiagnosis, scientific colon hygiene," etc., naming several others of the branches of the healing art. The presiding judge then proceeded to comment on the fact that even though other "modalities" are taught in the chiropractic school of today, the teaching of subjects other than "straight" chiropractic confers no right on the graduate to practice them. He, of course, rendered judgment against the defendants and enjoined them from practicing other than that for which they were specifically licensed. This opinion seems to have raised quite a furore in chiropractic circles and at once an effort was made to raise a fund to carry the matter to the Supreme Court of the United States. B. J. Palmer, exultant over the decision, is of the opinion that further litigation would be a mere waste of good money; he is elated because of the fact that for several years past he has preached the doctrine of "straight chiropractic." In this preachment he has an extensive following, many of his graduates believing that it is good practice for a chiropractor to "stick to his last."

We commend the opinion of the California judge to our State Board; we believe much of local interest may be found therein.

### EDITORIAL NOTES

INQUIRY has been made at headquarters office concerning an oil company of Texas that is making an intensive campaign among the physicians of Indiana to sell alleged oil producing properties in Texas. The company and its representatives are being investigated. If any physician is solicited, we would suggest that you write to headquarters office before signing on the dotted line.

It was suggested, at a recent meeting of a county medical society, that the photographs of deceased members of the society be placed on the walls of the "Doctor's Room" in the hospital. The suggestion resulted in the appointment of a committee on necrology to investigate the possibilities. We believe this is an idea worthy of consideration by every county medical society. Bring it up at your next meeting.

IN this issue of THE JOURNAL appears for the first time a question and answer department with regard to matters of insurance. It is planned to devote space to this department in alternate issues if the department proves to be popular with members. Do you understand your insurance? Are there questions you would like to ask? Send them to the headquarters office and they will be answered. Read the material in this month's issue on page 131.



IN the annual report of Keith Meyer, secretary of the Vanderburgh County Medical Society, we noted a matter of interest; it seems that the boys like a bit of refreshment after their meetings. For quite a period there were items of expenditure for soft drinks, Coca-Cola predominating. During the latter part of the year the budget for soft drinks seems to have increased, and finally charged waters began to appear on the list. Evidently repeal took place down in the "pocket" as well as elsewhere about the state.

DR. TOPPING, secretary of the Vigo County Medical Society, announces that all Vigo county physicians who have not as yet entered the race for coroner should get busy immediately. Reports from other counties throughout the state seem to indicate that physicians are becoming more politically inclined than heretofore. Well, we had our flair for political offices more than twenty-five years ago; one term as coroner effected a complete cure so that we now can sit back and enjoy the fun incidental to the campaigns for nomination in numerous sections of Indiana.

WHETHER it is an indication of increased prosperity within the ranks of the profession we do not know, but the payment of annual dues seems to be stepping up, this year. In our county we are about fifty per cent ahead of the same period in 1933 and from the numbers on the state cards it would seem that headquarters is experiencing a revival of dues payments. On the other hand, there comes to our attention an occasional plaintive note to the effect that some county secretary is experiencing no little difficulty in lining up his membership. On the whole, however, we believe the general trend is on the up.

THE third annual post-graduate course of the Indiana State Medical Association will be held in Evansville, Thursday, April 26th, in conjunction with the annual meeting of the First District Medical Society. This, one of the more recent innovations of our Association, has come to be regarded as very much worth while. We highly approve of the plan apparently adopted by the committee of taking this course to various points throughout the state; not only does this give the membership in the various sections an opportunity to attend the meeting without much loss of time, but it most certainly gives an impetus and added interest to the profession in the locality in which the meeting is held. Full details and program will be announced in the April JOURNAL.

AN account in the February issue of *Underwriters' Report* tells of the scheme of swindlers in California to sell insurance policies covering health benefits of all kinds, including "Dental benefits, free consultations, extractions, etc. \* \* \* Optometry service, free examinations, advise savings." A

payment of ten dollars is made by the policy purchaser and subsequent payments are collected under threat of selling the "account" to a local agency through advertising in the local newspaper. These insurance swindlers are now in jail. Investigate proposed insurance investments just as thoroughly as you would investigate other financial investments; in no other way can you be safe from such schemes as this in which the swindlers traded upon the name of a large and reliable company.

IF every eligible physician in your county is a member of your society for 1934, your county is entitled to be placed upon the Honor Roll as a one hundred per cent society as to membership. Some county societies have written, saying that they are one hundred per cent, but our records in the headquarters office show that there are eligible physicians residing in those counties who are not members of their society, and therefore, from the viewpoint of the State Association, the county does not have a one hundred per cent membership. Those counties having one hundred per cent membership for 1934 are:

BENTON COUNTY MEDICAL SOCIETY FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY SWITZERLAND COUNTY MEDICAL SOCIETY
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YES, SIR! We are still harping on the subject of malpractice suits, even though it might seem we must have about exhausted our resources for material on that subject. Only recently did we have a long chat with the local representative of one of the larger commercial defense companies. He was just emerging from the trial of a case in which judgment was rendered against the defendant doctor, the second case, locally, in the past few months in which judgment was had. This man sets the increase for Indiana, for 1933, at approximately eighty per cent! We wonder how any member of the Indiana State Medical Association can read those figures without making two comments to himself—that he is glad to have protection, and that he will see to it that no remark of his will be such as possibly could lead to a malpractice suit against one of his fellows.

SOME time ago we had a bit to say about a flagrant piece of "pink sheet" advertising in one of our larger cities. Now comes a page from a paper in the same city, carrying a high class bit of advertising, including what we judge to be the latest picture of the offender. We fail to understand why a physician who thinks that he has found something worthwhile, who has the notion that he has discovered some long-sought panacea, wants to rush into public print about it. Why does he not take it to his local society? If he wants to get into the big parade, by all means let him offer his wares to one of the national societies. We can tell him that he is wasting a lot of time trying to sell

his stuff to the general public; he may get his name before a certain number of the readers of the paper carrying the story, but this is well offset by the unfavorable opinion of his confreres. One of these days, if the Editorial Board permits, we are going to "name names."

THE Editorial Board has adopted the suggestion of the Council and the Executive Committee to the effect that a list of our membership be published in the December, 1934, JOURNAL. This of course means that only those who have paid their current dues can be included in the publication of members. We have established a deadline as of November fifteenth, after which no names will be included. It is a long time until November, but it is advisable that the little matter of the payment of 1934 dues be given attention at once. There are several added reasons for this, one of which is that delinquency begins as of February 1st. This means that your medical defense stops at that time unless you are paid up. Another reason for prompt payment is that THE JOURNAL will be discontinued to present members who are not paid up by June first. If you wish to preserve an unbroken file of THE JOURNAL and have not as yet paid your dues you had better get at it, right now.

AN A. M. A. official dropped in for a few moments during the recent county secretaries conference, at Indianapolis, and he remained long enough to imbibe a bit of the enthusiasm which is exhibited at these sessions. A bit later he expressed absolute amazement at the size of the "congregation" and the interest displayed at the meeting. We told him, truthfully, that this meeting was no exception, that our other conferences were just as well attended, and that Hoosier doctors were just as interested and just as enthusiastic in other sessions as they were in this one. We again reminded him that when it came to matters concerning the economic problems confronting the profession, Indiana was just about two jumps ahead of the regular procession; that our officers, our committees, our general membership were on their toes. We did not, however, remind him that all this furnished "argument" in favor of the recognition of Indiana in the matter of appointments to the various committees of the A. M. A.

OCCASIONALLY we get a complaint regarding our state dues of seven dollars, and suggesting that the dues be reduced. The answer, of course, is that it just can't be done if we are to continue with the work as we have been doing for the past several years. For instance, if dues were reduced to five dollars, we would have to drop not one but several of our activities and in reality there is not one that can even be curtailed without a substantial loss to the membership. And just how much does that two dollars mean to the individual member? Reduced to cigarette money, it means

about thirteen packs of fags a year—260 cigarettes—less than one per day! We will no doubt be accused of *lèse majesté*, arson, and other things when we make the observation that a cry for reduction of dues invariably comes from a county society that is not functioning to the best of its ability. Let the officers of that society get a little pep into their systems, get a little action into the meetings, and arrange "bang-up" programs; in a trice, all complaint of high state dues will vanish as if by magic!

Time for January twenty-seventh offers a bit of interesting and somewhat amusing comment on medical education. Quoting President Robinson of the College of the City of New York, it says, "In spite of increasingly prohibitive scholastic standards the volume and pressure of students come up and swamp the medical schools. The facilities of the schools are inadequate to meet the number and only the most excellent students are taken.

"City College is intellectually superior to other colleges in the country but it is not fortunate in personality and social prestige. Medical schools look to see who would be the most gracious practitioner of medicine. They look for affability and appearance.

"Unless you are truly eager to help people and to search out new discoveries, turn your efforts to some other branch of study." Time thus comments on the quotation: "Few U. S. university presidents have dared speak out thus frankly about the social hurdle which has been set up before their overburdened medical schools. Unable to eliminate brilliant applicants on the basis of marks, some medical school boards now weed them out for pimply faces, loud voices, awkward manners or unpressed pants." Prexy Robinson surely does like his New York; he makes it very plain that the "men of the east" are far superior to those of us who have our existence west of the Alleghanies!

A MOST cheering note comes from Surgeon General Hugh S. Cumming, in a statement recently released, in which he reports the death rate for the entire country, in 1932, as the lowest ever recorded in the United States. He points out that for the first half of 1933 unusually favorable health conditions prevailed and he hopes to be able to report the year as comparable to 1932. Another interesting feature of this report covers an investigation into the comparative health of families during their more prosperous years with that prevailing during the depression. This investigation comprises an intimate survey of one thousand families. The study reveals a somewhat higher sickness rate but, because of the activities of the various relief organizations, proper attention was had at all times, even though the families concerned were unable to pay for these services. This statement would seem to support the contention of the medical profession that illness is properly attended, whether the



physician is paid or not. He further cites the fact that from ninety-five per cent to ninety-seven per cent of the water supplied to patrons of railroads, bus lines, and airplanes is given an official O. K. by the United States Public Health Service. We long have been completely "sold" on the value of the public health department of our national government; the only thing we might wish is that there could be created a Department of Health, adding this to the various cabinet positions.

SELF-LAUDATION as a means of professional aggrandizement long since has been laughed out of court and consigned to the nether limbus by doctors everywhere, especially by all doctors who are familiar with our code of Medical Ethics, by all doctors who hold aloft the highest ideals of medical practice, by all doctors who have attained even the most modest degree of success. Yet, it may be asked, do we exercise a proper control in this regard over those whom we, necessarily, have associated with us? Reference is made to our secretaries, to our office assistants and nurses, and even to our wives and the members of our immediate families. In a sense, they too are a part of the medical profession, and it is our duty, however well-behaved and well-restrained in speech we may be ourselves, so to train and coach these associates of ours in the traditions of our profession that they do not make us appear, well-intentioned though they may be, as objects of ridicule before the well-informed laity. To hear praise at any time is flattering to our vanity, and to receive praise when it is well deserved is especially grateful; but, even among the profession, itself, to say naught about the intelligent laity, nothing will expose a doctor to a more withering scorn than the continuous, high-raised songs of praise chorused to heaven above by those intimately connected with the doctor's practice, carols which rise in such well-coordinated cadence as to give the impression of expertly supervised rehearsal, carols in which only too often may be recognized the discordant notes of deliberately malicious misinformation and cunningly misleading exaggeration.

We had just about reached the point of tolerance in the matter of requests for free medical services of various sorts and had arrived at the conclusion that when next solicited we would blow off in no uncertain terms; now comes another request, this from an organization in which we have a most abiding faith, but it seems that in these parlous times we can count on most any individual or organization getting into something or other that is not exactly as it should be. The local chapters of the American Red Cross present a plea for volunteer physicians to give first aid instruction to the members of the CWA corps. Locally, it is suggested that some fifteen hours be given to the work, each of the volunteers contributing an hour

to the task. As we have said, the American Red Cross is an organization for which we have the utmost respect, but why should medical men continually contribute their time, as well as their money, for such work. Every other person connected with the CWA project is paid, at least to some extent; why should the medical profession be asked to work for the mere glory of it? The answer is, of course, very plain; for the simple reason that physicians have come to be looked upon as the greatest exponents of the art of giving free service on any and all occasions. We stand ready to support any of the present programs of the President; we believe he is doing a monumental work, down there in Washington, but let's use a little common sense about so much of this free stuff!

A FEW weeks ago we registered at the Hotel Lincoln in Indianapolis. Looking about the lobby, we saw several signs announcing the fact that "Dr. Shanklin was giving a series of health lectures" in that hostelry, and among the inducements offered to attend were several references to free prizes, and all that sort of thing. The annual secretaries conference was in progress in the same hotel, and the editor was subjected to a good bit of kidding by several of those present for the conference. We now learn that "Dr. Lloyd C. Shanklin, metaphysician and evangelist," had a brief but interesting correspondence with Dr. William R. Davidson, secretary of the Indiana State Board of Medical Registration and Examination, and that at least one of the healing products he dispenses has been analyzed in our state laboratory. This analysis shows that his "Vim Food Salt" is essentially a compound of sodium chloride, with a trace of calcium. The common table salt represents something like 90.17% of the whole. There is also added some charcoal. With this blatant quack appears one "Dr. Irene Austinn," who seems also to be able to do a bit of lecturing. She is billed as "The Woman Who Understands." The Shanklin chap is a modest one; his announcement includes the following: "Select, elite society compose his audiences everywhere. Gold Cross Food Physician, Author, Traveler, Lecturer on Science of Living, Health and Success." Nor does he disdain to use "miracle processes," it seems. However, when friend Davidson wrote to him, telling him to get out and stay out, he came back with the little plea that he had already made arrangements to leave immediately and was "sorry any one troubled you, as I was here only for a short time to conduct evangelistic services and deliver a few free lectures." It is amazing how many of these self-styled authorities on health matters are financially able to go about the country with the "evangelistic" campaigns, delivering free lectures! Other states might well be on the lookout for this pair and put the stop order on them ere their activities get under way. (Editor's note: This man is no relative or friend of the editor!)

## THE PRESIDENT'S PAGE

### GROUP HOSPITALIZATION

When the group that fathered the preconceived and propaganda-nourished report of the Committee on the Cost of Medical Care finally, in amazement, realized that its scheme to foster socialization of medicine had utterly failed to "click" with the American public, and had only served to weld together more closely the opposition with bonds of American common sense, it turned attention in the direction of group hospitalization. Some one said a long time ago, something about half a loaf being better than no loaf at all; and group hospitalization looked promising. They figured they would deal more or less with the public in this scheme, and they expected the public to force the plan on the physician. It is extremely deplorable that in some localities they succeeded in some degree. Fortunately for most of us, they learned that a very large part of the American public still cherishes some ideas of individual freedom, and the right to think for itself and manage its own affairs.

In our own state, to date, we have been spared the tortures of this leach, through our ability to keep him from fastening himself on our hospitals. Not a few of us in Indiana remember well how we fought to escape his clutches.

Now that our hospitals are again filling up in the normal way, we are able to breathe a bit easier. However, it is dangerous ever to allow ourselves to be lulled even into drowsiness. This plan is far from a dead issue (i.e., Cleveland, Ohio). Those who are behind these moves are continuing their efforts, and we may expect to hear from them again.

Probably you were as surprised as I was to read in the December, 1933, *Bulletin of the American College of Surgeons*—an article by our old friend, William H. Walsh, in which he submits an ideal plan. It must be good, because Dr. Walsh admits that it is his own brain child.

### DR. WALSH'S SCHEME

Most of you probably know that just now Dr. Walsh's pet scheme (he has had several during his time) is group hospitalization. For some time he contented himself with planning and constructing hospitals, but now it seems that he has had a great awakening, and is convinced that nothing is so important as the act of forcing hospitals, and in turn the medical profession, into socialized practices, and as birds of a feather still seem to flock together, we find him speaking a language similar to that we have long since tired of hearing from our old friend, C. Rufus Rorem.

Please do not be misled. Most of our propaganda for this scheme is emanating from these two gentlemen.

Note some of Dr. Walsh's ideas. "Unfortunately the most aggressive promoters of plans for group hospitalization have been organizations and individuals primarily interested in the promotion of schemes for their own profit, with little or no real interest in the ultimate outcome so long as immediate profits were forthcoming." Yea, verily! and he might as well have said they still are. After presenting the well-known visionary and threadbare arguments in favor of group hospitalization, he presents by table just a glimmer of the impracticability of these schemes, i.e., twenty-one states regard such schemes as insurance contracts, seven states regard them as insurance contracts with reservations, ten states regard them as not insurance contracts, four states evaded, and eight did not answer the questionnaire. The burden of their song is that so-called group hospitalization contracts should not be insurance contracts. Can you see the task before us before we reach this Utopia?

To quote again from the same source, "An acceptable group plan for hospital service alone should specifically exclude any provisions for clinical attendance, this phase of hospital service remaining a matter of individual negotiations between the subscriber (patient) and his own physician." Yes, indeed, if only it would stop there; but you and I know from years of dealing with the public and the medical profession, that it will not stop there, and the agitators do not want it to stop there. In fact, this author very definitely points out the next step when he proceeds to discuss Combined Hospital and Medical Service in which he says among other things of like tenor, "To effectuate a workable group plan embracing hospital service and medical attendance the medical group will be obliged to formulate an equitable fee schedule, and this should be adjusted from time to time so as to maintain the total charges for medical attendance within the amount of the subscriptions paid for that purpose." In other words, the doctors will do the work and collect whatever there is in the fund for payment. No choice and no individuality.

To quote again, "A plan of the nature suggested would have to conform to the ethics of the medical profession in every particular." Can you visualize that? "And therefore consideration must be given to the following conditions whenever medical attendance is contemplated as a part of a group plan." (a) All features of the plan, including the fee schedule and the method of payment should be subject to regulation and adjustment exclusively by the local medical society. (b) The plan should not involve the solicitation of patients directly or indirectly by the physicians. (c) Compensation and all other conditions should be such as to assure good



medical service. (d) There should be no interference with reasonable competition. (e) The free choice of physician must be preserved. (f) The agreement between physicians and the hospital group should be, in all of its provisions and practical results, in accord with sound public policy and the code of ethics of the American Medical Association.

"If all these factors are thoroughly understood and embodied in a plan under the guidance and counsel of some one who is familiar with both hospital practice and the principles of the group payment plan, there is no reason why this activity cannot be established in every community where a sufficient enrollment is possible and there are no legal obstacles, thereby meeting a pressing need of the wage-earner and supporting the local hospitals."

No, gentlemen, keep your heads level. Remember this activity is coming from a very few agitators, few if any of whom know the real problems of the hospitals and the physicians from actual practice, and remember what the uplift boys want us to forget, namely, that the public does not want this, the hospitals do not want it, and the physicians do not want it.

We are now definitely on the upgrade. All hospitals are showing an increase in the number of new patients admitted. If the present rate continues, we may be reminded of the time when we had to beg a bit for a room for our patients in hospitals in Indiana.

How much more secure we shall feel if we can continue our present American plan of individuality in the practice of medicine! How much more pleasant it will be to look back on this period and feel that hospitals and physicians came through our most trying period without being smeared with the ideas and practices of socialism.

*E. E. Padgett.*

### SECRETARIES' COLUMN

How did you like the meeting in Indianapolis? That was the biggest conference we ever have had. There were sixteen presidents, thirty-nine secretaries, seven councilors, and forty-six visitors present.

Just think of the talent on that program: Dr. H. Jackson Davis, Dr. W. W. Bauer, Dr. Olin West, Dr. N. B. VanEtten, Father Schwitalla, Dr. J. C. Burkle, Dr. L. P. Harshman, Dr. A. L. Spinning, and Dr. E. M. Shanklin. I don't remember any program in connection with the State Association that has had as much talent.

Both national and local problems were thoroughly discussed.

The problem of the F. E. R. A., caring for the indigent sick, was taken up by Dr. H. Jackson Davis. His New York plan as outlined was worked out by him. To make his plan a success in any locality, it would be necessary for one person to go into that locality with the consent of the county medical society and work out a plan that would be best suited to that particular place. When that is done, there is a good working nucleus for the furthering of state medicine.

Now the federal government has appropriated money to take care of the CWA workers on a compensation basis, according to the newspapers. Even though they say that the patient has the right to choose his own physician, saying a thing and carrying it out are two different things. It also is said that he has the right to choose his own hospital, but will he get that opportunity? All of these things are really left up to the local administrator. If he is not playing politics, it may be all right; but if he is, then the doctors must be on guard. Reverend Schwitalla says that the government is throwing standards to the winds. They are letting down the bars so that any and all physicians and hospitals are eligible for this work, regardless of qualifications.

Dr. Van Etten's paper pointed out the abuses practiced on the hospitals and doctors by patients who could pay, and that a definite credit system for both should be put in force. I believe it would be worth while for all county societies to watch the new credit plan being put in force by the Marion (Indianapolis) County Medical Society.

Reports were received from over the state concerning the diphtheria and smallpox immunization campaign and they are very favorable. This shows the philanthropists that the the health of Indiana is being taken care of very satisfactorily.

I hope that everyone will send in data concerning the activities of their local societies to Dr. Shanklin. He then can give you the necessary publicity.

A motion was made and carried that the secretaries' conference be continued as it is. This desire was expressed by the secretaries and will probably cause the motion lying on the table of the House of Delegates for consideration next fall to be put off indefinitely.

Dr. W. W. Bauer presented the public health program in a splendid manner. He is, through his office in Chicago, trying to get the people educated on health matters. Listen to his talks on the NBC and CBC radio stations.

Dr. Olin West, in his talk, stated that the A.M.A. is back of us through all the depression, and that he would do his best to keep us from being pressed too much.

Dr. J. C. Burkle reported his experience with federal funds.

Dr. L. P. Harshman talked on immunization against diphtheria.

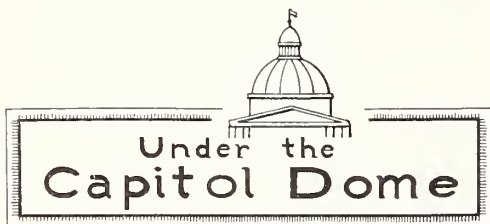
Dr. A. L. Spinning gave an ideal talk about the small society and its problems.

Dr. J. S. McBride showed very clearly what the larger medical society does do and can do.

I want to thank every secretary for his presence at this meeting and his interest in these subjects. It is through your presence that these meetings are made successful.

Thanks to all for my re-election. I will try to make the next conference even better than this one.

A. M. MITCHELL, M. D., *Chairman.*



#### INCOME TAX RETURNS

Mr. Will H. Smith, Collector of Internal Revenue in Indianapolis, has supplied the information, given below, to aid physicians in making income tax returns for 1933. Assistance in preparing the reports will be given without charge in Indianapolis, Fort Wayne, Evansville, Terre Haute, Gary, Hammond, Marion, Muncie, Anderson, South Bend, Lafayette, Logansport, and New Albany. The last hour for filing returns for the year 1933 is on or before midnight, March 15, 1934.

The professional man should use Form 1040 in the preparation of his Income Tax Return.

Schedule "A" of this form, No. 1 shows gross receipts from business or profession. In this schedule under "cost of goods sold," material and supplies are shown; under "other business deductions" in this schedule are shown salaries paid to employees, interest on business indebtedness, taxes on business property, and bad debts.

In using the item for the deduction of bad debts, it must be remembered that this deduction cannot be made, unless the items included in bad debts have been included in gross receipts under Item 1.

Under Item 16 of Schedule "A," and under "other expenses," which are to be itemized, the professional man may deduct all necessary expenses in pursuit of his profession. Railroad fare and hotel bills incurred by a physician while attending a medical convention are deemed to be allowable deductions as business expenses. This would also include professional magazines and journals.

Expenses incurred by a physician in taking a post-graduate course are personal expenses and cannot be deducted.

If inventory is kept as shown in Schedule "A," the adjustment of the inventory at the beginning of the year and the closing inventory at the end of the year, as shown in Schedule "A," will give the net cost of goods sold or used. The item of

net cost of goods sold or used, plus the items under "other business deductions" from Items 10 to 17, and deducted from total receipts from business, will give the net profit from business or profession.

Items of income or deductions other than those shown in Schedule "A" should be shown in other parts of items and schedules as outlined in Form 1040.

\* \* \*

#### ROAD MAPS READY

New maps of the state highway system of Indiana, showing changes in road surfaces and extensions of the system since the last map was issued a year ago, are now available at offices of the highway commission in the Statehouse annex.

The new maps show a total of 8,439.22 miles in the state system.

Several changes have been made in the new maps. In many cases the names of small communities which have no significance outside that locality have been eliminated. State properties, forests, game preserves, and parks are shown in solid blocks of color while the various points of scenic and historical interest in the state also are indicated.

The county highway systems indicated on the maps are said to be more accurate than in the past, due to the check of county highways made about a year ago as a part of the revised plan of distributing the gasoline tax.

The reverse side of the new maps shows an index of Indiana cities and towns, U. S. and state highway routes through the principal cities and a mileage chart for the convenience of motorists.

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#### LIQUOR AND TAXES

If the drinking habits of Hoosiers will be reflected in their health a study prepared by the Indiana Brewers' Association, taken from records of the state excise department, may be of interest to physicians.

This study showed that the consumption of beer in this state has steadily increased during this winter, while decreasing quantities of home-brew and hard liquors have been consumed.

Greatest consumption of beer was in September, but consumption figures for January ran only a little short of the peak.

Representatives of the brewers' association said that "malt sold in January would be equivalent to 281,500 gallons of home-brew, while manufactured beer totaled 1,237,320 gallons."

Excise taxes paid on hard liquor at the rate of twenty-five cents a pint jumped to \$64,652 in December, the first month after repeal of the Eighteenth Amendment, and just before the holidays; then in January they dropped to \$38,008. The best previous month for whisky was in May, when the excise taxes totaled \$12,044.50.

Beer brought \$20,137 more to the state treasury in January than the other alcoholic beverages combined.



INCOMES OF PHYSICIANS

The average monthly income of physicians and surgeons in Indiana was 5.61 per cent greater during July, August, and September of 1933 than it was for May and June of the same year, according to first tabulations of gross income tax returns. However, 173 fewer physicians and surgeons filed returns during the second gross income taxpaying period.

In July 2,030 persons in the medical profession made tax reports covering receipts for May and June, while in October 1,857 reported on receipts for July, August, and September.

The average monthly income of those reporting in July was \$469.47, while in October the average jumped to \$495.81.

In the October period, as in July, doctors paid more taxes than members of any other profession, due to the comparatively large number of doctors filing returns, although their average payment of \$13.01 was less than half that of the \$27.29 average of the undertakers. After the undertakers came the accountants, with an average payment of \$27.10; engineers and architects, \$25.37; attorneys, \$20.71; opticians, optometrists and oculists, \$19.40. Below the physicians in average tax payments were dentists, chiropractors, osteopaths, podiatrists and clergymen.

Clarence A. Jackson, director of the gross income tax division, pointed out that persons who owed less than \$10 tax were not required to file returns in July or October, although many such persons did file. Annual returns due last January, however, were required by law of all persons who had gross receipts of more than \$666.67 from May 1 to Dec. 31, 1933, regardless of the amount of tax owed. Compilation of these returns is expected to give a complete picture of professional incomes, as well as incomes from all other sources.

DIPHTHERIA REPORT FOR JANUARY

It is most gratifying to be able to report that diphtheria deaths for January, 1934, are by a considerable percentage the lowest that have been recorded for that month. For example, in 1930 there were eighteen deaths; in 1931 there were twenty-four deaths; in 1932 there were twenty-five deaths; and in 1933 there were eighteen deaths. This year in January there were thirteen deaths.

It is absurd to take the position that the campaign of immunization has brought about this improvement. In the first place, the number is too small to be significant, and the time too short. In the second place, there are only a few counties which began the campaigns long enough ago to expect a decrease for the month of January. However, it is not unlikely that the publicity which has been given the matter has already borne fruit. The public and the physicians have been made

“diphtheria conscious.” They have had diphtheria called to their minds so frequently that there was probably less delay in getting the patient to the doctor, and in making the diagnosis, and beginning proper treatment.

It is entirely possible for us to be “in at the kill” so far as this disease is concerned. Now is the time to strike. We may just as well as not be on our way to new low records in Indiana, and not only new records, but really low records. It is entirely possible to cut the number of deaths in half for the year 1934.

The following counties have reported deaths. Allen County heads the list with two. This is the third year that Allen County has had high mortality and morbidity rates for diphtheria. It is up to the profession in that county to bring an end to this disgraceful situation.

County	Deaths for January, 1934
Allen .....	2
Greene .....	1
Harrison .....	1
Jackson .....	1
Knox .....	1
Lake .....	1
Lawrence .....	1
Marion .....	1
Montgomery .....	1
Perry .....	1
Warrick .....	1
Wayne .....	1
Total .....	13

INSURANCE DEPARTMENT

The establishment of an insurance question-and-answer column in THE JOURNAL comes as the result of an increasing demand on the part of the profession for information in regard to this special field in which every physician invests a considerable amount of his income as a protection from loss by fire, accident, or death. Just as in the column conducted by Albert Stump, attorney for the Association, where answers are given to questions of a medico-legal nature, an attempt will be made here to answer any questions that a physician may ask in regard to insurance.

An experienced insurance man, familiar with the various fields of this broad subject, has volunteered his services in conducting this column. Any questions in regard to an insurance policy, technical points, and other details along this line that may be puzzling you, will be answered in this column if you will send your question to THE JOURNAL, 1021 Hume Mansur Building, Indianapolis, Indiana.

Following are some questions that have been asked, and the answers:

Question.—If I have theft insurance on my instruments in my office, are they covered when I

take them home, to the hospital, or while they are in my automobile?

*Answer.*—No. Proper coverage for protection against theft of instruments when they are taken away from the place specified in the policy is known as instrument floater insurance.

*Question.*—If I carry physicians' malpractice liability insurance and I am sued, is it necessary that I employ an attorney?

*Answer.*—It is not necessary to employ an attorney because your insurance company is required to defend you, and your state medical association also supplies an attorney.

*Question.*—Is it necessary to keep an automobile policy after it expires?

*Answer.*—There is no statute of limitations on possible liabilities; therefore it is wise to keep your automobile liability policy from year to year so you may know with whom you were insured in the event you are sued in later years for alleged injuries sustained in former years. For instance, if you were involved in an accident in which a minor (child) was injured that minor, upon attaining its majority, might sue you, alleging it had sustained some sort of a permanent injury. In such a case you would want to know which company had insured you at the time the accident occurred because it would be their duty to defend you.

*Question.*—I had a fire in my home, but it was confined to the closet in which I keep my personal clothing and there was no damage except to my clothing. Can I make a claim for my loss under my fire insurance policy?

*Answer.*—If you carry a fire insurance policy on your household goods you can make a claim for the damages done to your clothing because wearing apparel is covered under such a policy while said wearing apparel is in your home.

*Question.*—What can I do with my life insurance when I get too old to pay the premiums?

*Answer.*—There are several options in your policy which provide for this situation. You can take paid up insurance for less than the face amount and your policy would be payable at your death without payment of any further premiums; or you can use the cash value to buy yourself an income for life; or you can use the extended term which keeps the full amount of your insurance in force for a certain number of years. These options are their value of premiums in your policy. Ask any good insurance man to explain them to you.

## VOICE OF THE DOCTOR

### A SCHICK TEST NEEDED AFTER ATTEMPTS AT IMMUNIZATION

The administration of any immunizing agent should be followed with a Schick retest at the proper time, to know whether the person has developed immunity.

*Case Report:* Miss E. D., age twenty-two, student nurse at the Methodist Hospital, Gary, Indiana, was given a Schick test April 18, 1932, and was negative to the control and positive to the test (xxx). On April 26, 1932, she was given one-half c.c. diphtheria toxoid; on May 17, 1932, she was given one c.c.; and on June 7, 1932, one and one-half c.c. was given.

The toxoid was from a commercial biological house. According to a statement by the director of the laboratory of the manufacturing company, it contained four to five antigenic units to the c.c. No Schick test had been given Miss E. D. to determine whether immunity had developed.

On December 12, 1933, Miss E. D. was taken ill with clinical signs of diphtheria. Throat smears were positive and antitoxin was administered.

O. B. NESBIT, M. D.

### MILBANK MEMORIAL FUND

40 Wall Street, New York

Division of Public Health Activities

February 1, 1934

My Dear Mr. Hendricks:

We are deeply interested in problems of medical economics, and especially in the opinions of physicians and their professional associations in this field. We are anxious to learn what action has been taken in the last year by state and county societies and should appreciate any information you can give us on the questions listed on the attached sheet, for the return of which a stamped envelope is enclosed.

We should appreciate receiving any documents (or references to publications) which will inform us on activities in your state and local societies.

Yours very truly,

(Signed) I. S. FALK

February 7, 1934

Mr. I. S. Falk  
Milbank Memorial Fund  
40 Wall Street  
New York City

Dear Mr. Falk:

The Indiana State Medical Association is actively interested in the ever-increasing number of medical economic problems and has gained the reputation of not only talking of these problems but of really attempting to do something definite and constructive about them.

As your Mr. Kingsbury, without any real investigation or understanding, chose to attack the program of public health work that is undertaken in Indiana under the coordinated efforts of the State Medical Association, the State Medical School, and the State Division of Public Health, I do not feel that we care to answer your questionnaire as we have no assurance whatsoever that any report we



may make will not be misunderstood and even perhaps misrepresented, in light of past performances by at least one of your spokesmen.

From what we have seen of the public statements of Mr. Kingsbury we are of the opinion, regardless of facts, that your organization is committed to the socialization of medicine with all its evils, against which the medical organization of Indiana will continue to battle, both in the interests of the public and the profession. We feel that Mr. Kingsbury's action in timing his criticism of the new Indiana plan so it came during the meeting of the American Public Health Association here, and hence was arranged to embarrass the local public health officials and the medical profession of Indiana who were acting as hosts to that organization, was not good sportsmanship. Of course, it was difficult for anyone knowing the facts to understand how an officer of an organization so responsible to the public as is the Milbank Memorial Fund could make such a misstatement to the effect that Indiana had virtually given up all public health work.

These are some of the reasons why we do not feel we should answer your questionnaire.

Yours sincerely,

THOMAS A. HENDRICKS,  
*Executive Secretary.*

## DEATH NOTICES

W. W. SLOAN, M. D., of French Lick, died January fifteenth, aged sixty-one years. Dr. Sloan had been ill for several months. He was a graduate of the Hospital College of Medicine, Louisville, in 1898.

THOMAS C. ROWE, M. D., of Coal Bluff, died January tenth, aged eighty years. He graduated from the Long Island College Hospital, Brooklyn, New York, in 1866.

CHARLES W. FRINK, M. D., of Elkhart, died January twenty-seventh. Dr. Frink was a graduate of Rush Medical College, Chicago, in 1887. He was seventy-one years of age.

E. O. NEWLIN, M. D., of Fontanet, died February fifth, aged fifty-seven years. Dr. Newlin was a graduate of the Physio-Medical College of Indiana, Indianapolis, in 1904.

EDGAR F. STEWART, M. D., of Indianapolis, died January thirty-first, aged sixty years. Dr. Stewart graduated from the Eclectic Medical College of Indiana, Indianapolis, in 1908.

A. L. LEATHERMAN, M. D., Indianapolis, died January nineteenth, aged seventy years. Dr. Leath-

erman graduated from Columbia University College of Physicians and Surgeons, New York, in 1893.

METIUS M. ECKELMAN, M. D., of Elkhart, died February fifth, aged sixty-five years. Dr. Eckelman retired from active practice several years ago. He was a graduate of the University of Pennsylvania School of Medicine, Philadelphia, in 1894.

LEROY S. WALLACE, M. D., of Bunker Hill, died January twelfth, aged eighty years. Dr. Wallace was an honorary member of the Indiana State Medical Association, and of the Miami County Medical Society. Dr. Wallace graduated from Starling Medical College, Columbus, Ohio, in 1875.

ESPY K. SCHURTZ, M. D., formerly of Waterloo, Indiana, died January fourteenth at Jefferson Barracks, Missouri, where he was stationed as an army physician. Dr. Schurtz was a member of the Dekalb County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Indiana Medical College, School of Medicine of Purdue University, Indianapolis, in 1907. Dr. Schurtz left his practice in Waterloo to become an army physician during the World War and did not return to private practice.

## HOOSIER NOTES

DR. BEN DUKE has moved from Monroeville to Decatur where he will conduct a general practice.

DR. EUGENE MAIER has been made chief bacteriologist of the Merck Institute of Therapeutic Research.

MRS. NANCY EMILY VANDIVIER, wife of Dr. H. R. Vandivier, of Terre Haute, died January twenty-ninth.

DR. JAMES E. JOBES, of Indianapolis, and Miss Gladys Haws, of Indianapolis, were married January twenty-fifth.

THE annual meeting of the Tri-State Medical Society (Louisiana, Arkansas, Texas) has been indefinitely postponed.

DR. C. M. REYHER, of Gary, and Miss Clara Keller, of Gary, were married January tenth at Jeffersonville, Indiana.

DR. C. NORMAN HOWARD, of Warsaw, and Mrs. Gilbert Doolittle, of New York City, were married in New York January twenty-seventh.

THE *Medical Journal and Record*, a semimonthly publication, has changed its name to the *Medical Record* beginning with the January third issue.

DR. S. J. MILLER, of Lafayette, has been named acting head of the medical service of Purdue University to succeed the late Dr. Oliver P. Terry.

DR. MONT ROGERS REID, professor of surgery in the University of Cincinnati, has been awarded a gold medal, the Matas award, for work in vascular surgery.

DR. RUSSELL LAVENGOOD was elected president and Dr. H. Allison Miller was made vice-president of the Grant County Medical Society, January twenty-third. Dr. Lavengood will serve the unexpired term of Dr. Neal Loomis.

DR. CHARLES W. ROLLER, of Indianapolis, has been appointed medical examiner for the aeronautics branch of the Department of Commerce in Indianapolis. Dr. Roller succeeds Dr. R. E. Whitehead who has been made medical director of the aeronautics branch of the department.

THE Fort Wayne Medical Society recently passed a motion to the effect that the society as an organization would no longer cooperate with one of the local charity organizations in the operation of a clinic, because of the fact that there already is a township clinic to carry on the work.

DR. AND MRS. A. P. WALDEN, of Washington, have left Washington, and Dr. Walden is planning to take postgraduate work in eastern clinics. His practice has been taken over by Dr. C. P. Fox, who has moved to Washington from Garrett.

DR. NEAL M. LOOMIS, of Marion, president of the Grant County Medical Society and coroner of Grant County, has moved to Yuba City, California, where he will engage in the practice of medicine and surgery. Dr. Loomis has been associated with his father, Dr. John F. Loomis, of Marion, for the past six years. Dr. J. F. Loomis has been made Grant County coroner to fill the unexpired term of his son.

THE Woman's Auxiliary to the Indiana State Medical Association held a meeting recently in Indianapolis to make plans for the annual meeting to be held at the time of the meeting of the Indiana State Medical Association in Indianapolis, October ninth to eleventh. Officers for the Auxiliary are Mrs. I. N. Trent, Muncie, president; Mrs. Edmund D. Clark, Indianapolis, president-elect; Mrs. F. M. Gastineau, Indianapolis, corresponding

secretary; Mrs. F. B. Wishard, recording secretary, and Mrs. U. G. Poland, Muncie, treasurer.

THE program of the Carroll County Medical Society for 1934 includes meetings at Delphi, April thirteenth; at Camden, May eleventh; at Flora, June eighth; at Burlington, July thirteenth; at Brighthurst, August tenth; at Camden, September fourteenth; at Flora, October twelfth; at Burrows, November ninth; and at Delphi, December fourteenth. Speakers will include Drs. Edgar F. Kiser, Frank Gastineau, John McDonald, O. N. Torian, Goethe Link, and Thomas Noble, Jr., all of Indianapolis, Dr. Edward Ruschle of Lafayette, and Dr. E. O. Asher, of New Augusta.

ARTICLES of incorporation for the Community Hospital Association in Indiana, with the operation of a Negro hospital in Indianapolis as its object, were filed in the office of the secretary of state January sixteenth. Incorporators said that colored nurses have had to go outside of Indiana for their training, and it is hoped that both nurses and internes may be trained in the hospital when it is completed. The hospital will be maintained as a nonprofit organization. A site has not been selected and plans for the building will not be made until proper financial backing has been secured.

A postgraduate course, under the auspices of the Indiana State Medical Association, will be presented at Evansville, April twenty-sixth, at the time of the annual meeting of the First District Medical Society. Complete program will be published in the April issue.

THE Mid-Western Section of the American Congress of Physical Therapy will hold its spring session on Tuesday, March thirteenth, at Indianapolis. The morning will be devoted to clinics at the University and Indianapolis City Hospitals; the afternoon scientific session will be held at the Indiana University School of Medicine; and the evening session will be held jointly with the Indianapolis Medical Society at the Athenaeum. Speakers and clinicians will include Dr. Albert F. Tyler, president of the Congress; Dr. Disraeli Kobak, Chicago; Dr. C. I. Reed, Chicago; R. Beutner, Ph.D., Louisville; A. R. Hollender, Chicago; A. David Willmoth, Louisville; Dr. Max Thorek, Chicago; and Dr. John Stanley Coulter, Chicago. A member of the Council on Physical Therapy of the American Medical Association appears on the program; other speakers hold chairs of radiology, physiological chemistry, and physical therapeutics in various medical colleges. The program is planned upon a high scientific plane and its merit is assured by the personnel and the auspices under which the program will be conducted, as well as the subject



matter that will be presented in the symposia upon neoplastic diseases, physical chemistry, nose and throat conditions, cholecystitis, and rehabilitation of the disabled. There will be no registration fee. Every member of the Indiana State Medical Association is invited to attend. Dr. E. N. Kime, of Indianapolis, will preside at this regional meeting as chairman of the Mid-Western Section. Complete program appears on page xxxiii in this issue.

IN ADDITION to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association.

Fairchild Bros. & Foster

Soluble Stomach Extract (Fairchild)

Gilliland Laboratories, Inc.

Rabies Vaccine-Gilliland (Semple Method), 14 vial package

Hynson, Westcott & Dunning

Ampules Solution Antimony Thioglycollamide, 0.4 per cent, 10 cc.

Ampules Solution Antimony Sodium Thioglycollate, 0.5 per cent, 10cc.

Lederle Laboratories, Inc.

Tablets Cod Liver Oil Concentrate (Lederle)

Eli Lilly & Co.

Metycaine

Ampoules Metycaine 1%, 1 cc.

Ampoules Metycaine 2% and Epinephrine (1:25,000), 1 cc.

Ampoules Metycaine 2% and Epinephrine (1:50,000), 2.5 cc.

Solution Metycaine 2%

Tablets Metycaine, 0.15 Gm.

Ampoules Pentobarbital Sodium—Lilly 0.5 Gm. (7½ gr.)

Ampoules Sodium Amytal 0.125 Gm. (1½ gr.) for Intramuscular Use (Lilly)

Pulvules Sodium Amytal 1 Grain (Lilly)

E. S. Miller Laboratories

Ampoule Sterile Solution Dextrose, U. S. P., 50 Gm., 100 cc.

Ampoule-Vial Sterile Solution Dextrose, U. S. P., 10 Gm. 20 cc.

Ampoule-Vial Sterile Solution Dextrose, U. S. P., 25 Gm., 50 cc.

Ampoule-Vial Sterile Solution Dextrose, U.S.P., 50 Gm., 100 cc.

National Drug Company

Antimeningococcic Serum, two 15 cc. double and ampoule vials packages

Antimeningococcic Serum, one 15 cc. cylinder package

Antimeningococcic Serum, one 30 cc. double end vial package

Diphtheria Toxoid, twenty 1 cc. vials package (ten immunization treatments)

Rabies Vaccine-Human (Semple Method), four 2 cc. syringes and ten 2 cc. syringes packages

Refined Diphtheria Toxoid (Alum Precipitated)

Typhoid-Paratyphoid Combined Vaccine, 30 vial package (ten immunizations)

Typhoid-Paratyphoid Combined Vaccine, 150 vial package (fifty immunizations)

Typhoid Vaccine, 3 vial package (one immunization)

Parke, Davis & Co.

Ventriculin, 500 Gm. bottle

Soluble Gelatine Capsules Parke-Davis Haliver Oil, Plain, 3 minims

Schering & Glatz, Inc.

Urotropin

Tablets Urotropin 5 Grains (0.33 Gm.)

Tablets Urotropin 7½ Grains (0.5 Gm.)

Euphthalmine Hydrochloride

Schering Corporation

Neo-Iopax

Ampoule Solution Neo-Iopax, 20 cc.

Sharp & Dohme, Inc.

Antimeningococcic Serum, 30 cc. syringe package.

E. R. Squibb & Sons

Refined Diphtheria Toxoid Alum Precipitated-Squibb

Ucoline Products Co.

Ucoline Standardized Cod Liver Oil

## INDIANA UNIVERSITY NEWS NOTES

DR. MARGARET TELFER OWENS, woman's physician at Indiana University, has been elected vice-president of the Indiana Student Health Council. Dr. Paul B. Williams, Ball State Teachers College, was chosen president of the council.

HARRY BAUM, of Madison, assistant in the Indiana University physiology department, discussed "The Chemistry and Physiology of Trinitrophenol" at the January meeting of the anatomy and physiology seminar of the I. U. medical center.

DR. LOUIS B. WILSON, director of the Mayo Foundation at Rochester, Minn., spoke at the February meeting of the Sigma Xi national honorary scientific society. Dr. Wilson, graduate of the University of Minnesota, is a national authority in the field of pathology and ex-president of the American Association of Medical Colleges.

STRESSING the necessity for doctors to study their patients from the psychological standpoint and the use of hypnosis in curing mental disturbances, Dr. G. S. Snoddy, of the Indiana University psychology department, spoke before a recent meet-

ing of the Phi Chi professional medical fraternity. Dr. Snoddy's subject was "Relation of Medical Science to Psychology."

DR. B. E. ELLIS of the Indiana University School of Medicine at Indianapolis spoke before the February meeting of the Phi Chi professional medical fraternity at the Bloomington division of the I. U. medical school. Dr. Ellis spoke on "Modern Trends in Ear, Nose and Throat Work," explaining the newer operations being done and the use of modern instruments in diagnosis and treatment. Several members of the Indianapolis chapter of Phi Chi attended the meeting in Bloomington.

A NEW diet manual has been prepared by the dietary department of the Indiana University Hospitals, Indianapolis, under the direction of Lute M. Troutt. The book is for the use of students of dietetics. The manual contains diets for all forms of diseases, including dental diseases, diarrhea, anemia, typhoid, diabetes, and others. Diets for infants, pre-school children, school children and adults are prescribed in the manual. Weight and height tables for girls, boys, men, and women are included in the book.

## BOOK REVIEWS

### BOOKS RECEIVED

TREATMENT OF THE COMMONER DISEASES. By Lewellys F. Barker, M.D., Professor Emeritus of Medicine, Johns Hopkins University; Visiting Physician, Johns Hopkins Hospital, Baltimore, Md. 319 pages. Cloth. Price, \$2.50. J. B. Lippincott Company, Philadelphia and London, 1934.

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AMERICA SELF-CONTAINED. By Samuel Crowther. 340 pages. Cloth. Doubleday, Doran & Company, Inc., Garden City, New York, 1933.

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NATURE, M.D. Healing forces of Heat, Water, Light, Electricity and Exercise. By Richard Kovacs, M.D., clinical professor of physical therapy, Polyclinic Medical School and Hospital, New York. 181 pages. Cloth. Price \$2.00. D. Appleton-Century Company, Inc., New York and London, 1934.

\* \* \*

MODERN CLINICAL PSYCHIATRY. By Arthur P. Noyes, M.D., superintendent of State Hospital for Mental Diseases, Howard, R. I. 485 pages. Cloth. Price \$4.50. W. B. Saunders Company, Philadelphia and London, 1934.

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### BOOK REVIEWS

THE HISTORY AND EPIDEMIOLOGY OF SYPHILIS. By William Allen Pusey, A. M., M. D., LL. D., professor of dermatology emeritus, University of Illinois. Cloth. Price, \$2.00. 113 pages. Charles C. Thomas, publisher, Springfield, Illinois, 1933.

This latest volume from the facile pen of Dr. Pusey does not compare very favorably with his recently published companion work, "The History of Dermatology." This new book is very elementary but very readable. Dr. Pusey is a strong proponent of the Columbian origin of syphilis, to the establishment of which premise he devotes the first twenty-five pages of his book, without presenting a single argument of those holding an opposite view. The body of the history proper, some forty-five pages, is an elementary, encyclopedic presenta-

tion of the names, from Fracastor to Wassermann, that have been intimately linked with the development of syphilology. The chapter on epidemiology is adequate. The paragraphs on the control of syphilis deserve to be graven on the lintels of public buildings so that all could not fail to read. It would be unfair to the publisher to fail to comment upon the mechanical excellence of the book which is an exquisite example of the printer's art from splendid illustrations and silver jacket to antique end-papers.

\* \* \*

TEXTBOOK OF MEDICINE. By 141 American authors. Edited by Russell L. Cecil, A. B., M. D., S. D., professor of clinical medicine, Cornell University, Medical College, and Foster Kennedy, M. D., F. R. S. E., professor of neurology, Cornell University, Medical College. Third edition, revised and entirely reset. 1,664 pages, illustrated. Cloth. \$9.00 net. W. B. Saunders Company, Philadelphia and London, 1933.

To students and clinicians the usefulness of this volume is obvious, judging from the many reprints in 1927, 1928, 1929, and 1933, as well as two revisions and resets in 1930 and 1933. Up-to-date material is constantly being added from current medical literature with splendid references and bibliographic detail.

The well selected contributors have been given opportunities to succeed themselves, thereby adding zest to their work and opportunity to improve and revise each section with continuity of purpose. This has special advantages to the reader.

Each edition shows a more concerted effort at the establishment of disease entities in the endocrine system as well as in disorders of the nervous system. All of this tends to show a greater appreciation of man as a unit in society rather than a probable diseased person with a sick body for treatment.

A long period of usefulness to the profession is predicted for works of this kind.

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SURGICAL CLINICS OF NORTH AMERICA. (Chicago Number—October, 1933), Volume 13, No. 5; and (Pacific Coast Number—December, 1933). Volume 13, No. 6. Per clinic year, February to December, paper cover, \$12.00; cloth, \$16.00. W. B. Saunders Company, Philadelphia and London, 1933.

The number five, Chicago number, starts off with a symposium on "Important Surgical Operations in Children," and there is a very complete description of intracranial tumors, mastoiditis, cystic tumors of the neck, empyema, pyloric stenosis, intussusception, urinary tract surgery, and congenital dislocation of the hip. That, together with several other equally complete subjects, makes this number most interesting and useful. The publishers round out the year with a Pacific Coast number, and it in no way detracts from the general standard of the previous numbers. In fact, to this reviewer many articles were above the average. This is particularly so in most of the articles which are free from verbosity and the sense of points are arrived at quickly by the authors.

The Surgical Clinics of North America as they are now published remain the distinct contribution to medical literature which has been their standard for years.

## SOCIETIES AND INSTITUTIONS

BENTON COUNTY MEDICAL SOCIETY met at the Gay Hotel, Fowler, January twenty-ninth, for a dinner meeting. Drs. William Washburn and J. C. Burkle, of Lafayette, were speakers.

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BOONE COUNTY MEDICAL SOCIETY met at Lebanon, January seventeenth, to discuss methods of carrying out the diphtheria immunization campaign.

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CASS COUNTY MEDICAL SOCIETY held a meeting at Logansport, January nineteenth. Speakers were Dr. W. R. Hickman, Dr. W. E. Barnett, and Dr. Don Miller. Attendance numbered twenty-five.



DEARBORN-OHIO COUNTY MEDICAL SOCIETY held its regular dinner meeting at Aurora, January twenty-fifth. A business session was held following the dinner.

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DEKALB COUNTY MEDICAL SOCIETY met in January at the Auburn Hotel, Auburn, with fifteen present, to discuss ways and means of handling the diphtheria immunization campaign.

\* \* \*

ELKHART COUNTY MEDICAL SOCIETY met at the Hotel Elkhart, January fourth, for a dinner meeting. Dr. C. R. Yoder, of Ypsilanti, Michigan, talked on "The Psychological Management of the Patient." Attendance numbered forty-one.

At the February eighth meeting, Dr. Joseph L. Baer, of Chicago, presented a paper on "Normal Obstetrics in General Practice." Forty-three attended this meeting.

\* \* \*

FORT WAYNE MEDICAL SOCIETY held regular meetings February sixth and twentieth. Dr. Robert Wilkins spoke on "Hormones in Gynecology" February sixth, and on February twentieth, Dr. Donald P. Abbott, of Chicago, discussed "Indigestion."

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FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY met at Hillsboro, February first. Dr. George E. Collett, of Crawfordsville, spoke on the "Early Diagnosis of Acute Appendicitis." Sixteen members attended.

\* \* \*

GIBSON COUNTY MEDICAL SOCIETY met at Wheeler's Cafeteria in Princeton, February twelfth, with twenty-one present. Dr. Larue D. Carter, of Indianapolis, talked about "Encephalitis B." At this meeting, the society voted to reject the federal relief plan for indigent, and voted to sponsor the diphtheria immunization campaign if cases were properly investigated.

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HAMILTON COUNTY MEDICAL SOCIETY held a meeting at Westfield, February thirteenth, with twenty-two present. Dr. P. E. McCown, of Indianapolis, presented a paper on "Urethral Prostatectomy."

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HANCOCK COUNTY MEDICAL SOCIETY held its regular dinner meeting at the Columbia Hotel, Greenfield, February nineteenth. Dr. J. E. Ferrell presented a paper on "Purpura."

HANCOCK COUNTY MEDICAL SOCIETY met at the Columbia Hotel, Greenfield, January fifteenth. Dr. Samuel Kennedy and Dr. B. G. Keeney, of Shelbyville, and members of the local society discussed economic conditions and local problems concerning FERA and other government work. Attendance numbered eighteen.

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HENDRICKS COUNTY MEDICAL SOCIETY met at Danville, January nineteenth, to hear Dr. William Gabe, of Indianapolis, speak on "Medical Economics."

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HENRY COUNTY MEDICAL SOCIETY members met at the Henry County Hospital, Newcastle, January eighteenth, to hear Dr. Larue Carter, of Indianapolis, discuss diagnostic points in making a neurological diagnosis. Attendance numbered twenty. Dr. Joseph L. DeCourcy, of Cincinnati, was the speaker February fifteenth. His subject was "Surgical Treatment of High Blood Pressure."

\* \* \*

HOWARD COUNTY MEDICAL SOCIETY met at the Elks Club, Kokomo, January fifth. Dr. William S. Tomlin, of Indianapolis, discussed "Middle Ear Infections." Twenty-four members attended. At the February second meeting, Mr. Ed Souder, of Kokomo, was the guest speaker, and told of members of the medical profession in that vicinity a half century or more ago. He pointed out the fact that of the twenty-seven mayors Kokomo has had, seven have been members of the medical profession.

INDIANAPOLIS MEDICAL SOCIETY met at the Athenaeum, January twenty-third. A symposium on "Intravenous Medication and Blood Transfusion" was presented by Drs. A. J. Jaeger, W. P. Moenning and Cleon Nafe.

INDIANAPOLIS MEDICAL SOCIETY held its regular meeting at the Athenaeum, January thirtieth. A symposium on gall bladder disease was presented by Dr. Henry Leonard, Dr. R. H. Moser, and Dr. C. A. Stayton. The February sixth meeting of this society was held with the staff of the Indianapolis City Hospital, at the hospital.

At the regular meeting, held February thirteenth, Dr. K. K. Chen, of Indianapolis, discussed new antidotes for poisons. Dr. R. N. Harger spoke on "Are We One Hundred Million Guinea Pigs?"

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JASPER-NEWTON COUNTY MEDICAL SOCIETY met at Morocco, January twenty-sixth, with seventeen present. A paper on "Radio Therapy with Special Reference to Cancer of the Breast" was presented.

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MARSHALL COUNTY MEDICAL SOCIETY held its February seventh meeting at the Ross House, Plymouth, with eighteen present. Dr. F. R. Clapp, of South Bend, presented a paper on "Some Practical Points in Obstetrics."

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MONTGOMERY COUNTY MEDICAL SOCIETY met at Culver Hospital, January eighteenth. Dr. P. V. Pace, superintendent of the Rockville State Tuberculosis Hospital, was the principal speaker. The business meeting was preceded with a dinner.

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NORTHEASTERN INDIANA ACADEMY OF MEDICINE was addressed by Dr. Ernest R. Carlo, of Fort Wayne, January twenty-fifth, in Kendallville. Dr. Carlo's subject was "Pneumonia in Children."

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OWEN COUNTY MEDICAL SOCIETY met at Spencer, January nineteenth. A discussion of diphtheria immunization and FERA work formed the program.

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SHELBY COUNTY MEDICAL SOCIETY held its January seventh meeting in the Alcazar Dining Room at Shelbyville, with Dr. E. E. Padgett, of Indianapolis, as the principal speaker.

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TIPPECANOE COUNTY MEDICAL SOCIETY members were entertained at the Soldiers' Home, Lafayette, January eleventh, as guests of Dr. C. L. Rowland and Colonel and Mrs. John H. Gilpin. An attendance of one hundred was reported.

A regular meeting was held at the Purdue Memorial Union Building, February ninth, when Dr. Carl D. Camp, of Ann Arbor, discussed "The Emotions, Their Effect on Cause and Diagnosis of Disease." Attendance numbered one hundred.

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WABASH COUNTY MEDICAL SOCIETY met at the Wabash County Hospital, February seventh, with Dr. C. J. Clark, of Indianapolis, as the speaker. His subject was "Cardiac Irregularities."

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WASHINGTON COUNTY MEDICAL SOCIETY enjoyed a banquet meeting at the Blue Teapot, Salem, January tenth. Wives of the members were guests. Plans were made for regular meetings on the first Wednesday night of each month.

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WAYNE-UNION COUNTY MEDICAL SOCIETY met at the Richmond-Leland Hotel, Richmond, January eleventh, with thirty present. Dr. Bevis, of Dayton, Ohio, presented a paper on "Hare Lip and Palate."

## INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

November 10, 1933.

Present: William N. Wishard, M.D., chairman; J. H. Stygall, M.D.; E. D. Clark, M.D., and T. A. Hendricks, executive secretary.

Release for publication in Monday morning papers, November 20, "The Common Cold," read and approved. Release for publication in Monday papers, November 27, "Thanksgiving Eating," read and approved.

Radio release, Saturday, November 4, "State-wide Immunization Campaign Against Diphtheria."

Requests for speakers:

November 10—Carroll County Medical Society, Flora, Indiana.

November 17—Parent-Teacher health meeting, Ridgeview School, Miami County. Posters and material requested and promised by State Board of Health.

November 22—Parke-Vermillion County Medical Society, Clinton, Indiana. Speaker obtained.

Articles for publication in the Parent-Teacher Bulletin:

December—"Diphtheria Immunization," approved.

January—"Health Resolutions for the New Year," to be presented at the next meeting of the Bureau for approval.

Letter written to the editor of THE JOURNAL of the Indiana State Medical Association approved by the Bureau. This letter contained an excerpt from minutes of the Bureau meeting of November 3 concerning statements that appeared in the Indiana newspapers from heads of nationally known clinics.

Letter received from the director of the Bureau of Health and Public Instruction of the American Medical Association in answer to request of the Bureau concerning the advisability of using a physician's name in introducing a broadcast over the radio.

The following letter, addressed to the executive secretary, was received from the secretary of the Committee on Meetings and Publications of the American Public Health Association:

"Please accept the warm thanks of the American Public Health Association for the excellent job you did as chairman of the Sub-committee on Publicity for our sixty-second annual meeting.

"Your support, in the person of Mr. Nagley, could not have been bettered. I can recall no meeting of this Association during which our publicity representative was so constantly in attendance.

"The Indianapolis papers were most generous in giving us space, which is all due to your work and Mr. Nagley's. I do not yet know how much notice was taken of the meeting by the press outside of the state, but I am sure the record will be a good one.

"You and Mr. Nagley contributed a great deal to the success of the Indianapolis annual meeting, and we shall remember you gratefully."

The following letter was received from the chairman of the State Committee on Lye Burns:

"It is indeed gratifying to know that the House of Delegates approved the recommendation of the Committee on Lye Burns for an appropriation of one hundred and fifty dollars.

"In regard to the pamphlet for lay consumption, the committee is of the opinion that a three- or four-page pamphlet should be devoted exclusively to the dangers of lye preparations, together with appropriate cures, and that it should be forceful in character and presented in a form that will be read.

"Will you please tell me if our committee is supposed to work up this pamphlet, or, if this is done by the Bureau of Publicity? I should also like to know the approximate cost of printing a pamphlet, such as I have described. As far as cures are concerned, I think that these can be obtained without any additional expense."

The Bureau approves the suggestion contained in the letter and asks that the chairman of the Committee on Lye Burns

prepare a draft of material that might be used in such a pamphlet.

Request received from the education and publicity director of the *American Journal of Public Health* to be placed on the mailing list of the Bureau. Secretary instructed to comply with this request.

Letter received from the secretary of the Chicago Medical Society, 185 North Wabash Avenue, Chicago, stating that the Chicago Medical Society, "the official medical society of Cook County, affiliated with the Illinois State Medical Society and the American Medical Association, has not adopted any resolution approving public advertising."

November 24, 1933.

Present: William N. Wishard, M.D., chairman; J. H. Stygall, M.D.; E. E. Clark, M.D., and T. A. Hendricks, executive secretary.

Release for publication in Saturday afternoon papers, December 9, "When Winter Comes," read and approved.

Radio releases:

Saturday, November 11—"Diphtheria Prevention."

Saturday, November 18—"The Common Cold."

Requests for speakers:

February 12, 1934—Gibson County Medical Society, Princeton, Indiana. "Encephalitis B." Speaker obtained.

October 8, 1934—Gibson County Medical Society, Princeton, Indiana. "Head Injuries." Speaker obtained.

A letter was received from the director of the Bureau of Health and Public Instruction of the American Medical Association in regard to radio broadcasts and newspaper articles dealing in detail with treatment of disease.

Copy of an original paper by Dr. Livingston Dunlap to be made and delivered to the historian of the Association.

Letter received from the director of Radio Informativo Medico Genio of Buenos Aires requesting that information in regard to the Indiana State Medical Association be sent to him. The Bureau suggested that perhaps this station could be placed upon the mailing list to receive THE JOURNAL.

January 4, 1934.

Present: William N. Wishard, M.D., chairman; J. H. Stygall, M.D.; E. E. Clark, M.D., and T. A. Hendricks, executive secretary.

Radio releases:

Saturday, November 25—"Thanksgiving Eating."

Saturday, December 2—"Observe Health Rules in Prevention of Colds."

Saturday, December 9—"When Winter Comes."

Saturday, December 16—"A Safe Christmas."

Saturday, December 23—"Holiday Health."

Saturday, December 30—"Health Resolutions."

Request for speakers:

December 12—Fayette-Franklin County Medical Society, Connersville. "Immunization Campaign." Speaker obtained.

Reports on medical meetings:

November 22—Parke-Vermillion County Medical Society, Clinton, Indiana. "Upper Respiratory Infections."

December 7—Rotary Club, Michigan, City, Indiana. "Keeping Your Health."

December 15—Washington High School, Indianapolis, Indiana. "Health Hints to the Growing."

Letter received from the business manager of the Deaconess Hospital at Evansville, which reads as follows:

"For the past several months we have been broadcasting direct from the Hospital Solarium, a health educational talk each week. The various members of our medical and surgical staff have assisted us in presenting various medical topics. We have found this to be very educational and are confident



that scientific subjects should be presented by scientific men rather than for the public to receive it from quackery, patent medicine, fakes and other types of magic.

"I assume the role of announcer and present, in a very dignified and ethical way, the speaker something as follows: 'Each Thursday afternoon at 3:30 o'clock, the Deaconess Hospital presents a health educational program. We are pleased to present to you Dr. ———, who will speak to you on ———.'

"We do not mention anything about the doctor, where his office is located, or any other point. It simply gives his paper scientific weight and also enables us to select men who are capable in the particular subject.

"I am very anxious to know if the Indiana Medical Association is opposed to any such plan."

The secretary was instructed to state in answering this letter that the Bureau had no objection to the broadcasting, but that the rule of the Bureau of Publicity forbids the use of the name of any physician who is in private practice. The broadcast should be made simply under the approval of the Deaconess Hospital as the Bureau feels that it will put any physician in a delicate position if his name is used.

A verbal report upon the funeral of Dr. Miles F. Porter, past president of the State Association, was made to the Publicity Bureau. The State Association was represented at this funeral by the editor of THE JOURNAL and the executive secretary. In addition to the remarks which appeared in THE JOURNAL, the Bureau makes the following comment:

Dr. Miles F. Porter was elected president of the Indiana State Medical Association in 1895 and he served as president during the meeting at Fort Wayne in 1896. His work was notable as a surgeon, as a teacher, and as a trustee of the American Medical Association. In addition to honors from the Indiana State Medical Association and the American Medical Association, he served as president of the Western Surgical Association and was a charter member and one of the organizers of the American College of Surgeons. For a number of years he served as chairman of the Board of Censors of the Indiana organization of the American College of Surgeons. For many years he was professor of surgery at the Fort Wayne Medical College, and when that institution became affiliated with the Indiana University School of Medicine he served as professor on the new staff. After the death of the late Dr. Albert E. Bulson, Dr. Porter served as editorial advisor of THE JOURNAL of the State Association until the work was taken over formally by the Council.

Letter received from the director of the Bureau of Medical Economics of the American Medical Association, asking that reports of the Bureau of Publicity be sent to the American Medical Association. The Bureau instructed the secretary to comply with this request.

Articles which appeared recently in the Indiana Parent-Teacher monthly *Bulletin* were brought to the attention of the Bureau of Publicity.

Letter received from Mary C. Ronald, of Melvin and Ronald, Publicity, Boston, requesting reports of the Publicity Bureau of the Indiana State Medical Association. The Bureau authorized the secretary to send copies of the handbook of the House of Delegates in which reports of the Bureau of Publicity appear.

Clippings in regard to diphtheria immunization campaign brought to the attention of the Bureau. This campaign has resulted in more favorable publicity for the medical profession throughout the state than any other program of public health education that has been presented since the creation of the Bureau of Publicity in 1922. Immunization cartoons, stickers and cards were brought to the attention of the Bureau. The executive secretary's office was instructed by the Bureau to use these stickers on all correspondence sent out from the headquarters office.

Comments in the Better Business Bureau *Bulletin* on "Lash-Lure," a dangerous aniline hair dye; Kruschen Salts, and Crazy Crystals brought to the attention of the Bureau.

The Copeland Bill (Tugwell Bill) which rewrites the present pure food and drug law, and provides strict regulations in

advertising and merchandising drugs and patent medicines, brought to the attention of the Bureau.

A letter was received from the historian of the Association, acknowledging receipt of the Dunlap manuscript.

Letter received from physician in Bedford who is interested in the preparation of a history of medicine in Lawrence County. The Bureau expressed the hope that every county society would appoint someone to gather medical historical material for each county.

INDIANA DIVISION OF PUBLIC HEALTH  
BUREAU OF COMMUNICABLE DISEASES

Monthly Report, January, 1934

Reports from the health officers indicate a noticeable increase in the incidence of the seasonable diseases, such as chickenpox, measles, and scarlet fever; a drop was shown in whooping cough, diphtheria, and typhoid fever, during the month of January as compared with the previous month. All counties in the state submitted either negative or positive reports.

A summary of diseases from the urban and rural populations is given below:

Diseases	Total	Urban	Rural
Tuberculosis .....	167	131	36
Chickenpox .....	907	742	165
Measles .....	1,432	737	695
Scarlet Fever .....	998	356	642
Smallpox .....	14	2	12
Typhoid Fever .....	6	3	3
Whooping Cough .....	182	135	47
Diphtheria .....	191	119	72
Influenza .....	329	3	326
Pneumonia .....	83	8	75
Mumps .....	131	52	79
Poliomyelitis .....	1	0	1
Meningitis .....	18	4	14
Trachoma .....	6	0	6
Vincent's Angina .....	1	1	0
Tetanus .....	1	0	1

DIPHTHERIA. A favorable decline is noted in diphtheria, there being a decrease of one hundred cases during January as compared with the previous month. During the corresponding month of last year there were 226 cases, and in January, 1932, there were 361 cases. In view of the fact that the average for the last five years is 218 cases, the total for the current month is very encouraging.

INFLUENZA. The current month showed an increase in the prevalence of influenza; however, a total of 329 cases is not at all alarming. Out of a total of 329 cases reported, only three occurred in the urban areas. This is a seasonal disease and may be expected to decline during the month of February and also March. Last year the state experienced an epidemic, especially in the rural sections, so it is not possible to make a true comparison with the corresponding month of last year.

SCARLET FEVER. The total for cases of scarlet fever is a little above the estimated expectancy, which is based on the experience of the last seven years, but we do not consider the total of 998 cases alarming. This is also a winter disease and because of the constant changing of the weather from one extreme to the other, an increase was anticipated. The cases were pretty well distributed throughout the state, Marion, DeKalb, and Laporte being the only counties to report more than ninety cases.

SMALLPOX. One less case of smallpox was reported during January, as compared with the preceding month. During January of 1933 there were twelve cases reported.

TYPHOID FEVER. A new low level for the past twelve months was reached in January, when only six cases of typhoid fever were reported. The estimated expectancy for January, over a seven-year period, is fourteen cases.

Saint Joseph County led in the reporting of meningococcus meningitis, five out of a total of ten cases occurring in that locality. Five cases of trachoma occurred in Greene County, and one case in Crawford County. Lake County reported a case of tetanus and a case of Vincent's Angina.

THURMAN B. RICE, M. D.

#### FORT WAYNE MEDICAL SOCIETY

Resolutions Adopted on the Death of Dr. Miles F. Porter:

WHEREAS, The Fort Wayne Medical Society has suffered a severe loss in the passing of one of its oldest and most useful members; and,

WHEREAS, It is eminently fitting and appropriate that some expression of our appreciation of the many sterling qualities of mind and heart possessed by Dr. Porter be given; therefore

BE IT RESOLVED, That the Fort Wayne Medical Society bears willing witness to the fact that the example of industry and fair dealing set by our illustrious coworker has been, and ever will continue to be, a stimulus to the younger members; that his attainment in the art of diagnosis and his skill in the surgical treatment of the ills affecting mankind was of such high character as to merit the emulation of every member.

BE IT FURTHER RESOLVED, That these resolutions be spread on the minutes of the society and a copy sent to the surviving members of the family in the hope that they may obtain some idea of the esteem and regard in which this exemplar of manly and professional virtue was held by his medical friends and associates.

B. VAN SWERINGEN,  
H. O. BRUGGEMAN,  
CHARLES R. DANCER, *Committee.*

#### LAKE COUNTY MEDICAL SOCIETY

A dinner meeting of the Lake County Medical Society was held at the Lyndora Hotel, Hammond, Thursday, January 11, 1934, President Teegarden presiding.

A list of applications was presented for ballot, all the petitioners being duly elected, as follows: E. S. Dickey, A. R. Episcopo, E. L. Levin, F. H. Mervis, A. A. Ross and B. M. Turbow, all of East Chicago; A. J. Dian and M. Herschleder, of Gary; S. L. Brown, E. L. Eggers and M. B. Gevirtz, of Hammond; M. R. Bascomb, of Calumet City, Illinois; L. E. Dupes, of Hobart and Harry Silvian, of Whiting.

The secretary read a letter from Dr. W. D. Weis, our new county health officer, in which he expressed a desire to co-operate with the society in every manner possible. He asked that all city health secretaries send him a copy of all reports made to the Indiana State Board of Health and to the United States Public Health Service. Dr. Weis also requested that a special committee be appointed from among the physicians in the rural sections of the county, to look after the work of the C. W. A. nursing. On motion said committee was appointed, consisting of the health officers of Crown Point, Lowell and Hobart.

The secretary presented a resume of the Vigo County plan, in connection with this nursing service, and announced that our larger communities had already arranged to see that this work was properly carried out.

A synopsis of the present situation as to the F.E.R.A. and the C.W.A., as it affects the local medical profession, was given by the secretary.

Announcement was made of a special meeting of the staff of Mercy Hospital, Gary, for Tuesday evening, January sixteenth, at which time Dr. R. G. Leland, of the A.M.A., would talk on modern economic problems in medicine. All county members are invited to attend this meeting.

Dr. Rauschenbach then presented a statement of the activities of a promotion scheme, in Hammond, by two women from Joliet, Illinois. They undertake to put on baby clinics and contests at one of the local department stores. The promoters

sell books of tickets to the mothers of the entrants, these tickets to be used in a popularity voting contest. For example, if 300 babies are entered and the mothers all buy at least one book, the "take" will be \$1,050. The department store pays the promoters \$50 as a premium to have the contest at their store. Of this \$1,100, the local American Legion Women's Auxiliary will receive the sum of \$50. Objection is being raised to the local medical profession being hooked up with a promotion scheme, where practically all the money taken in goes out of town. So, on motion, it was decided that the Lake County Medical Society discontinue the scheme, and that the rules of the society be enforced. (Our rule is that no clinic, of any nature whatsoever, shall receive the assistance of our members until such clinic has been officially endorsed by this society.) On motion, the secretary was instructed to write a letter to all Hammond members of this society, advising them that the present baby clinic-contest did not have this support.

Dr. Kellogg Speed, of Chicago, supplied the scientific program for the evening, his subject being, "Injuries of the Knee Joint, Other than Fractures," presenting by far the best group of pictures we have ever had, together with a most entertaining discussion thereof.

The meeting having been a joint session with the tenth district medical society, Dr. H. C. Parker, district president, presided during the scientific session. District society officers were elected as follows: president, T. W. Oberlin; secretary, N. K. Fortser, both of Hammond.

Adjourned.

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The Lake County Medical Society met in regular session at Gary Methodist Hospital, Thursday, February 8, 1934, President Teegarden presiding.

A letter from the board of trustees of the Lake County Tuberculosis Sanatorium was presented, inviting the society to hold its March meeting at that institution. On motion, the invitation was accepted.

A letter from Dr. Harry W. Long, of Gary, was read, advising that he was removing to Escanaba, Michigan, and would make application for membership in the society at his new home.

The secretary presented a request from the local chapters of the American Red Cross, to the effect that members of this society donate their services to a plan looking to the education of CWA workers in the matter of first aid. After some discussion, the following motion was unanimously adopted:

"That the society go on record as being opposed to the furnishing of free medical services for this purpose; that if the American Red Cross, through its local chapters, wishes to carry out this work so that the members participating be paid for their services, that such arrangements be made through the various local societies of the county."

The secretary was instructed immediately to notify all members of this action of the society.

The scientific program was presented by Dr. A. J. Larkin, of Chicago, who discussed "Radium in General Practice." Dr. Larkin most thoroughly covered the subject, using various appliances to show just how the radium was applied, together with two reels of pictures showing the actual treatment of cases and the results obtained.

Considerable discussion of the subject was had, chiefly via the question route.

J. A. TEEGARDEN, *President.*  
E. M. SHANKLIN, *Secretary.*

#### MIAMI COUNTY MEDICAL SOCIETY

The Miami County Medical Society met at Peru, January twenty-sixth, at seven-thirty p. m.

Dr. W. H. Holmes, of Logansport, presented an impromptu talk on "Embryology of the Nose," the most common diseases, and treatment of same, as confronted by the general practitioner. This was a most interesting and instructive talk, well received by all present, and the society extended a rising vote of thanks to Dr. Holmes for his part in giving us an interesting meeting.



Dr. Malouf then made some remarks about the advisability of placing photographs of the deceased members of the Society on the walls of the "Doctors' Room" of the hospital, and a motion was made by Dr. Griswold, seconded by Dr. Carter, that a committee on necrology be appointed to investigate the same. Under remarks on the question, Dr. O. C. Waincott, Peru, made the following remarks:

Mr. President and Gentlemen of the Society:

Imagine, if you can, a few years hence—  
Someone standing here before you, in this self-same hall,  
Gazing upward at your picture, as it hangs upon the wall.  
Will he say, "The records show that this man's work was all well done?"

Or will he say, "I'm telling you, he was a hard-boiled son-of-a-gun."

And if he is a cynic, with a rather classic mind,  
He'll apologize to Shakespeare (or at least feel so inclined),  
And as he stands before you, this reminiscing cuss  
Has a melancholic face, as he soliloquizes thus:  
"Alas! my poor old Yorick, I knew him well.  
Perhaps he's gone to his reward in heaven, or to—who can tell?"

'Tis plain the great Omnipotent, some use for all intended,  
So, maybe, this good man's usefulness is not entirely ended.  
Forsooth, if dust to dust return to feed the growing hay,  
Perhaps he yet may stop a crack, to keep the cold away.  
Or, if his dust to dust return to fertilize the wheat,  
He may help to make a biscuit for some hungry one to eat."

The above remarks created a great deal of mirth, and the speaker received many congratulations from members of the society.

The president appointed Drs. Griswold, Ridenour, and Waincott as a committee to act upon the motion which was unanimously carried.

The meeting adjourned, to meet again February 23, 1934, in the "Doctors' Room" at the hospital.

E. H. ANDREWS, M. D., *Secretary*.

#### ST. JOSEPH COUNTY MEDICAL SOCIETY

The St. Joseph County Medical Society held its first regular meeting for 1934 on January 23, in the Public Library. Dr. J. V. Cassady, the new president, presided. He announced the following committees for the present year:

Program—Drs. Alfred Ellison, chairman; P. J. Birmingham, and Edgar Myers.

Family Night—Drs. M. J. Thornton, chairman; R. W. Spenser, and K. T. Knode.

Necrology—Drs. H. F. Mitchell, J. B. Bertling, and F. P. Eastman.

Legislative—Drs. R. L. Sensenich, chairman; C. Langenbahn, E. J. Lent, and J. W. Hilbert.

Annual Meeting—Drs. R. V. Hoffman, chairman; H. W. Helman, D. A. Bickel.

Radio—Drs. George Green, A. M. Sullivan, and C. S. Bosenbury.

Library—Drs. M. W. Lyon, A. S. Giordano, and S. A. Clark.  
Custodian—Dr. L. F. Fisher.

Public Health and Education—Dr. Milo Miller.

New members elected to the society are Drs. Herbert Wurstler, E. M. Sirlin, and W. N. DuVall, all of Mishawaka, Ind.

Dr. C. S. Bosenbury presented the evening's paper on "Feeding the Normal Infant." Discussions by Drs. Bolling, Eastman, Miller, Knode, and Pyle.

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The St. Joseph County Medical Society met in the Medical Room of the Public Library, Tuesday, January 30, 1934, with President Cassady in the chair and 42 members and three guests present.

The speaker of the evening, Mr. Charles B. Kahler, CWA Administrator, spoke on "The Relationship of the Practice of Medicine to the Federal Relief Program." It was stated that the policy of the federal relief is to render more adequate the facilities for medical care now existing in the community.

There will be continued the use of hospitals, clinics and medical services already established. The family physician-patient relationship shall be maintained. A definite relationship between the medical society and the relief organization is being attempted. In closing, Mr. Kahler praised the Mishawaka Plan and suggested that a similar plan with revision of rates be submitted by the St. Joseph County Medical Society to him for approval and to be sent on to Washington for acceptance. Discussions by Drs. Sandock, Sennett, Sensenich, Thompson, Birmingham, Harmon, Balla, Mott, Haley, Frank, Christophel, Graham, Myers, and Wygant.

Dr. R. L. Sensenich moved that the Public Relations Committee be authorized with power to act for the society in submitting a plan which would meet with Mr. Kahler's approval and so be acceptable at Washington. The motion was seconded and carried.

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The St. Joseph County Medical Society was called to order by President Cassady, February 6, 1934, at 8:45 p.m., in the Medical Room of the Library, with 41 members and one guest present.

Dr. Birmingham reported that representatives of the Rural Bankers Life Insurance Company had approached the St. Joseph Hospital, asking permission to rent a ward by the year for use of its insurance cases. They were instructed that this could not be done, but that beds in the ward could be rented by the day at the regular rates, providing that the doctors attending these cases were acceptable to the staff of the hospital and members of the St. Joseph County Medical Society.

This was discussed by Drs. Selby and Bickel.

Dr. K. Knode moved that a committee of four, consisting of the chief of staff of each hospital and the president of the society, be appointed to look into this matter and report to the society. Seconded and carried.

Two papers were given. Dr. G. M. Rosenheimer spoke on "Evaluation of the Risk and Status of Anesthesia." He discussed the lack of teaching of anesthesia in the medical schools, the increasing importance of anesthesia in regard to the prognosis of surgical cases, the graduated classes of risks for anesthesia, and the indications for each class.

Discussion by Drs. Helman, Green, Lyon, Terry, Mitchell, and Hillman.

Dr. Alfred Ellison presented a paper on "Palinaesthesia," in which he contributed data on his own personal research work with dilute HCl intravenously for reversing anesthesia. He has found that a 1 per cent HCl solution introduced into the blood stream will revive both animals and humans from extreme deep anesthesia to a state of wakefulness and normal sensibility in a very short period of time. It appears the procedure will be beneficial in surgical shock, electrical shock, gas poisoning, and possibly other states of unconsciousness and shock.

Discussion by Drs. Birmingham, Faltine, Fish, Green, Rosenheimer, Lyon, Terry, Bickel, Langenbahn, Vitou, and Cassady.

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The St. Joseph County Medical Society met in the Library, February 13, 1934, with President Cassady presiding.

Dr. C. M. Sennett reported that no definite agreement had been reached with Mr. Kahler, CWA Administrator, on the arrangement and fees for the care of the indigent sick.

Dr. Cassady stated that Dr. Charles B. Kern, medical adviser for the Rural Bankers Life Insurance Company, had approached Epworth Hospital and had asked to rent five rooms by the year for insurance cases. He was informed that this was impossible, as the hospital is open to the public and rooms can be had only at the regular rates.

The paper of the evening, "Some Principles Underlying the Successful Treatment of Ano-Rectal Disease," was given by Dr. C. M. Fish. He stressed the point that careful and painstaking technique is equally important in surgery of the anatomy under discussion as surgery elsewhere in the body.

Discussion by Drs. McMeel, Birmingham, Condit, Wygant, and Thompson.

D. W. FRASH, M. D.,  
*Assistant Secretary-Treasurer.*



SWITZERLAND COUNTY MEDICAL SOCIETY

Whereas, death has again entered our ranks and removed therefrom one of our most valued colleagues, in the person of Dr. Hugh M. Thiebaud, who was known throughout this entire section as a moral, honest, upright Christian gentleman;

Whereas, the death of Dr. Thiebaud is an irreparable loss to the community, a community that has known him all his life; and during that time he endeared himself to our people to an extent not equalled by many. Therefore in memory of our dearest brother, be it resolved,

That in the death of Dr. Hugh M. Thiebaud, the medical profession of Switzerland County has lost one of its most valued members: A physician who was noted for his honorable and ethical conduct towards his brother physicians.

We therefore deeply lament his death.

Be it further resolved, that we extend our warmest sympathy to the family of the deceased and pray that the Omnipotent Father may extend to them the consoling power of his divine love, so that they may be able to bear up under the deep affliction caused by one so greatly beloved.

Be it further resolved, that a copy of these resolutions be presented to the family, and that copies be furnished to the press for publication.

THE SWITZERLAND COUNTY MEDICAL SOCIETY.

ABSTRACTS

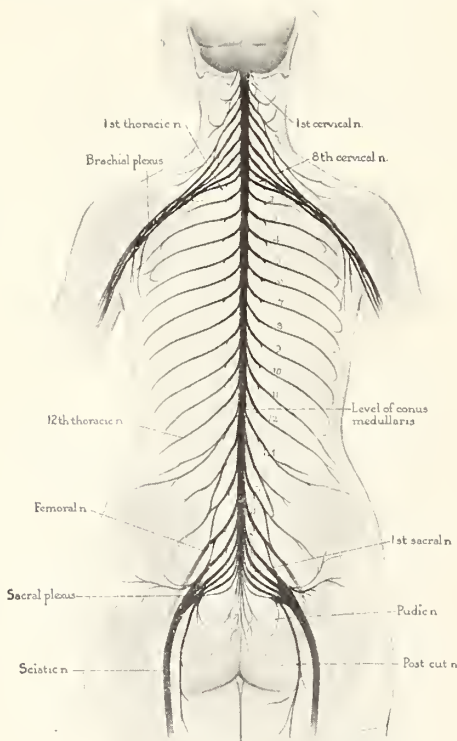
TRACING THE TRANSMISSION OF SYPHILIS

DUDLEY C. SMITH and WILLIAM A. BRUMFIELD, JR., Charlottesville, Va. (*Journal A.M.A.*, Dec. 16, 1933), point out that the follow-up of contacts and tracing sources of infec-

tion in order to be most effective should be started immediately. Infectious patients should be started on sterilizing therapy as quickly as possible so as to reduce the period of contagiousness and all suspects gotten under observation to make it possible to begin treatment at the first diagnostic evidence of infection. The patient is instructed to try to get his or her contacts to be examined and advised. Letters should be sent to the contacts requesting them to report for examination. When all other measures fail, the suspects should be reported to the health officer. To have contacts come for examination through the advice of their friends or associates is ideal. Each new patient informs his friends in turn until all contacts are brought under observation. Letters constitute the second method of search. An intelligent nurse can persuade contacts to report when other methods have been unsuccessful.

HYPERINSULINISM, A DEFINITE DISEASE ENTITY: ETIOLOGY, PATHOLOGY, SYMPTOMS, DIAGNOSIS, PROGNOSIS AND TREATMENT OF SPONTANEOUS INSULINOGENIC HYPOGLYCEMIA (HYPERINSULINISM)

SEALE HARRIS, Birmingham, Ala. (*Journal A.M.A.*, Dec. 16, 1933), gives the definition and frequency of hyperinsulinism and states that hunger is the most constant symptom. At least a hundred cases have been reported by American and European clinicians, surgeons and pathologists who have made thorough studies of all phases of hypoglycemia due to the hypersecretion of the islet cells of the pancreas. Sufficient data have accumulated in medical literature to warrant the discussion of hyperinsulinism as a definite disease entity. The author endeavors to outline the etiology, pathology, symptoms, diagnosis and treatment of hyperinsulinism as derived from published reports of many cases and from a study of the disease over a period of ten years.



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### ORIGINAL ARTICLES

#### THE PEDIATRICIAN AND THE OTOLARYNGOLOGIST\*

JAMES C. CARTER, M. D.  
INDIANAPOLIS

The gaining of immunity to many infections is one of the amazing miracles of childhood. It is an active fight, a struggle for existence which in some cases is a losing one, much to our dismay, fright, and sorrow. We watch babies, all too soon in life, make contacts with the family infections. We are often careless in our warning that a cold which gives the mother or the father or the grandparents only a slight snuffle means a severe infection to a baby who has not had the years of repeated inoculation to produce resistance and immunity. The infections a baby gets from elderly people are for the most part fatal. There is an old laboratory experiment of taking an organism harmless to the host and passing it through several animals to produce a virulent infection. So it is when old people pass their seemingly harmless infections on to babies. The infections from the parents are not as severe, and while producing prostration do likewise produce an increasing immunity. There is, it is true, a degree of inherited immunity.

If the baby survives the first few years of having infections brought to him or to her, the immunity to the family type of sickness is raised to what we may term par.

In case there are older children with school and other outside contacts, the under school age youngsters get repeated infections. Again, if these are not fatal, there is an increase in resistance which we call immunity. All of us have watched this experiment. Then comes the contact in kindergarten or in school. On the law of chance, half of the youngsters can resist the ordinary infection which is passed about by coughing, trading candy, gum, or food in our super-heated school rooms.

\* Presented before the Section on Ophthalmology and Otolaryngology at the French Lick session of the Indiana State Medical Association, September, 1933.

The other half will go down, some to bed for a few days, some to an acute otitis media, some to a mastoid, some to ruined health, and some are overwhelmed. It is a wonderful thing to watch and the pediatrician is given the honor place in the reviewing stand. It is his role to sort out those youngsters who need the help and aid of the otolaryngologist.

Each year when school opens our so-called "cold" season begins, and we have our calls about "stuffed-up" or "drippy" noses. Then one hears of an earache. It is an opportunity to see if heat, rest in bed, a bland oil in the ear and nose will quiet the inflamed drum. It takes a few cases to learn whether expectant treatments work the cure or whether without any delay the service and help of the otolaryngologist is needed. Once the virulence of the infection has been determined there is no reason to hesitate in a plan of action. Personally, I am willing to admit that I do not know how to incise an ear drum. I once thought I did.

Acute otitis media requires a careful watching of the nose, tonsils and an estimate of the adenoid. Tonsillitis more than twice, enlarged glands of the neck which do not go down or the large obstructive tonsils, mean to me that the time has come for the removal of the offenders without much regard for age. It is my own idea that early in June when there is almost complete freedom from contacts with coughs and colds is the ideal time for this operation; of course any time must do in an emergency, but there is no excuse for the week-before-school-opens removal of the tonsils and adenoid. The youngster is left "knocked out," a raw throat receives a fresh infection with the gathering of the school, and the parents are disappointed in the results. They have good reasons for this in many instances and we, the doctors, must take the blame.

It has been my custom for several years to see that my youngsters for four nights before going to the hospital get a fair dose of milk of magnesia, and for the four days all the sugar, karo or sugar stick candy they can eat, within reason, of course. These youngsters avoid ether nausea and the terrible let-down. There is never any great water loss to give us all a fright. These youngsters stay close to bed for a week if it is at all possible.

A mastoid following an acute otitis media is for the otolaryngologist. The pediatrician expects a good result. My own experience is that I have more faith in the years of observation and the ability of the otolaryngologist than I do in x-ray pictures and hurried operation. Any bit of laboratory work is just as strong as the weakest link in the chain of found or unfound facts.

There has been considerable discussion in the medical journals concerning the relation of otitis media to gastroenteritis or gastroenteritis to otitis media. We know that all diseases are blood stream infections, so when a baby is suffering from a real gastroenteritis, its resistance is very much lowered and if the infection is given half a chance it is apt to appear elsewhere. Likewise we have all seen an otitis media almost overwhelm a youngster by becoming a real blood stream infection and an acute gastroenteritis makes its appearance. There is also the interesting theory that an infection in one part of the body seeks a like tissue to attack. All such cases that I recall of double infection have occurred in youngsters who were bad risks from any viewpoint.

The human nose, it would seem, is not famed nor noted for its ability to be violently plunged under water. However, about the only sport the youngsters have and thoroughly enjoy is swimming. We have all seen the infections which follow the water plunge. If one wants to be half way popular with his younger patients he will be considerate when it comes to talking seriously about the dangers or evils of a swimming pool. About the best one can do is to suggest a bland oil in the nose after the plunge.

Where there is a true sinus infection this is a problem for the pediatrician and the otolaryngologist. None of us are fully satisfied with the radical sinus operation.

The skin test for allergy was a brilliant but disappointing lot of work. Just when we thought we had asthma and its near relations all in our hands, we found that we were only on the road to going somewhere. It is worth while to remember that eggs, oats, cocoa, chocolate, and things made with wheat bran are the most common offenders among the foods. Chicken feather pillows, horse hair or felt mattresses, unprotected wool blankets are the more common irritating agents in the clothing class. Of course a head with every opening filled with pus must be attended to or there can be no improvement.

The hay fever and asthma sufferer has some ray of hope from air conditioning. In some cases the relief is wonderful. This is all an experiment and it will take time to determine what can or cannot be done. A simple test for the hay fever sufferer is to place him on a pad on the floor in front of the ice box. The chest should be covered to prevent too much chilling. Then the ice box door is opened and the cold air is allowed to fall down onto his face. The relief is gained in a

few minutes and the process can be repeated as often as needed. Those who frequent the cooled theaters complain of a terrible oppressive feeling when they come out. Those who have air conditioned homes find they get a night's sleep in fair comfort.

The use of cold vaccines, whether autogenous or stock, is an experiment. No harm can be done.

The use of vitamins also promised a lot which, like the skin tests in allergy, has not been all that was hoped for. There is an increasing number of reports of damage done through the giving in concentrated form of this or that substitute for what we once thought of as good wholesome food mixed in its proper relation, of plenty of rest with sufficient amount of sleep and above all the freedom from the irritation of parents who expect too much from a growing youngster.

The pediatrician is the man who gets the correct view of the infections the youngsters have and he knows their value and the damage done. He asks the help and cooperation of the otolaryngologist, and when this has been given, he likewise asks that the youngster be sent back for any observation or medication needed. If this is done the results are pleasing not only to the pediatrician and his helper, the otolaryngologist, but most of all to the patient himself and to his parents.

## DISCUSSION

W. F. CLEMENTS, M. D., Evansville: I wish that Dr. Carter's respect and serious consideration of nose and throat infections were more generally shared by all men who come in contact with infants and young children.

I would like to stress the point he makes as to the different types of so-called "colds" in children which we like to index as endogenous and exogenous. It is also our opinion that an occasional endogenous cold is not a bad thing for a child as it seems to keep his resistance up and makes him more able to withstand not only the exogenous colds, but the other infections with which he is very liable to come in contact. I also prefer the word "resistance" rather than "immunity." We feel that it is well to note that resistance to respiratory infections are of a comparatively short duration after an attack has been successfully resisted.

The most common complication caused by the well known anatomical arrangement of an acute rhinitis and pharyngitis is an extension of an infection to the middle ear. Treatment of this condition is often abused. It is my opinion, from a fairly respectable experience, that these infected ears should have an early incision in the drum, and then by all means, for at least the first forty-eight hours, not be irrigated, but kept dry. The rather common custom of making an opening in every child's ear drum that is red, and informing the parents to douche the ear with any solution every three hours is poor surgical judgment.



We never irrigate an ear until it is found absolutely necessary and can be kept clean in no other way. We have repeatedly seen instances in which a child's or infant's ear has continued to run for a rather unusual period and then when we suggested stopping the irrigation and treating the ear merely by drying it and laying in a gauze wick, the discharge very quickly subsides.

I think Dr. Carter's advice as to June being the month for removing tonsils and adenoids is well worth consideration, for we have all seen many cases in which after the removal of adenoids especially, a cold coming before a firm scar has been able to be laid down by nature, permits the recurrence of lymphoid tissue in the nose and also, in my opinion, is largely responsible for the lymphoid buttons which grow back into the tonsillar foci. It is also well in trying to avoid the lymphoid tissue in the nasal pharynx to impress upon the parents the necessity of breaking the habit of mouth breathing, as that nearly always leads to the recurrence of the adenoid growth.

As to the mastoid infections in children, I do think that Dr. Carter is quite right in not laying too much stress on the x-ray. Most any infant or small child with an acute otitis media will show haziness in the mastoid cells, and it is only by clinical experience that the otologist may be able to decide whether or not opening of the mastoid is necessary. I am convinced that better results are always obtained when the operation is delayed and not done early. There are very few instances where a mastoid requires a quick opening. I say this, being cognizant of the insidious nature of some ear infections.

Early opening of bone conditions in any part of the body, and I like to think of head infections the same as they are in other parts of the body, never heal as satisfactorily or as quickly as when they are opened later and have had time to be walled off and remedied by nature's great protector, granulation tissue, and the diseased bone clearly outlined by the decalcification.

The often seen gastro-intestinal trouble referred to by Dr. Carter, concomitant with acute otitis media, to me is a very perplexing situation, and I have often thought that possibly when the ear infection definitely has preceded the gastro-intestinal symptoms, some of the diarrhea may be due to poor digestion resulting from some reflex abnormality, either from the motility of the gastro-intestinal tract, or its secretions by way of the articular branch of the vagus nerve which supplies part of the tympanic membrane. My grounds for considering the gastro-intestinal symptoms of infants with ear involvement as not primarily an infection at least at its incipency, is based on the fact that the pediatrician treats these children with a non-fermenting diet rather than with an antiseptic or other drugs.

My experience has been that sinus infections in children require much less surgical interference

than do adults. With the possible exception of an acute ethmoiditis, I have never seen much severe sinusitis in infants and children. Then as to the poor results of sinus surgery hinted at by Dr. Carter, it is my humble opinion that it is the result of an erroneous belief that sinus operations must necessarily be conservative. Bone infections in other parts of the body are not treated conservatively, and I see no reason not to apply the well known principles of surgery in osteomyelitis in bones of the head as they are applied to the femur or humerus.

As to the use of cold vaccines, my experience with them, other than temporarily to give a quick increase in resistance, has been rather unsatisfactory. When one considers the temporary resistance gained from the so-called cold, I think that we ask too much of the "round" of cold vaccines. The allergic reaction referred to by Dr. Carter must necessarily cause all rhinologists to admit that outside of a few reactions to the well known foods to which he refers—wheat, milk, and egg proteins—very little can be said. I have noted some improvement in these children when they were given moderately heavy doses of calcium and small doses of parathyroid. I do think that in any of these children who show a tendency towards allergic reactions or infections of the respiratory membranes, the only definite dietary help to add is to be sure that there is a sufficient amount of vitamin A present, and I also believe that vitamin G, found most commonly in fresh liver, is possibly not sufficiently stressed to the parents.

I wish to disagree with Dr. Carter in his giving physics to children as a pre-operative measure, with the possible exception of operations on the intestines. I could never see anything to be gained by upsetting and irritating the gastro-intestinal tract before administering an anesthetic, especially ether, which is most commonly used in children. I want heartily to commend him for calling attention to the advantages in giving the children a high carbohydrate diet a few days preceding operation.

F. V. OVERMAN, M. D., Indianapolis: For years the pediatrician has trained fond parents to give their children only one piece of candy each day following the regular meal. Now comes an outstanding man in his specialty who recommends that for four days preceding tonsil and adenoid operation the child be given all the candy, karo syrup, and sweets that he will eat. Somehow to me this does not tune with the previous teaching. I have operated a number of children where the sweet treatment was given, and I recall one child that for four days following operation could retain nothing in his stomach. I should like for Dr. Carter to explain to this section the theory on which he gives this treatment.

In the main I agree with him and must say I think this paper is one of the most practical and helpful papers ever read before this section.

J. W. CARMACK, M.D., Indianapolis: There are so many good points in this paper that one cannot hope to touch upon them all. I wish to remark upon the use of vaccines. We hoped for much from the use of this therapy and we have had some results. In the first place, I do not believe that Dr. Carter meant just what he said, that no harm could be done. We know that there are many different strains of bacteria and that vaccine made from one strain of bacteria if given to an individual will not produce high immunity or concentration of immune bodies in the blood unless that vaccine happens to contain that strain which is present at the time that vaccine is given, so that stock vaccines ordinarily act as foreign proteins. Foreign protein therapy does produce changes, and a number of the cases do get some improvement in the anti-body content of the blood. Anti-bodies are not produced in sufficient quantities to be effective under four to six weeks, and if we give vaccine therapy as a prophylactic measure, we can not wait two or three weeks before the cold season and get results. What we are likely to do under those conditions is to get a negative reaction, which does occur, and lower the resistance to colds at the time when the patient most needs it. Therefore, if we expect to get results, we must give the vaccine so that the doses are terminated a matter of six weeks before the cold seasons occur.

As to the specific autogenous vaccines, we had hoped to get results and we do get results in some upper respiratory infections, but here we should have the vaccine made from the specific organism which is in that case, and in that way get specific anti-bodies in the blood. The making of autogenous vaccines is difficult and most bacteriologists admit that they do not have entirely satisfactory methods of making autogenous vaccines. Preparation of the vaccine is of great importance in the consideration of specific vaccine therapy.

JOHN F. BARNHILL, M.D., Indianapolis: This paper is sensible and quite to the point, with one exception. When the writer stated that adenoids and tonsils, except in emergency, should be removed in June, I wondered, for statements like that are apt to be misinterpreted. Witness Osler's assertion that men should be chloroformed when past sixty. He didn't mean it just that way, and certainly Dr. Carter does not mean that June is the only season when throat operations may be safely done. Any month and any season is a suitable time for operation provided the operation is necessary, the patient is a safe risk, and has been properly prepared. I should, of course, fully agree with the writer in the advice not to operate and allow the individual immediately to enter school.

J. V. CASSADY, M.D., South Bend: In putting these allergic patients before an ice box, I would like to make the suggestion that if they clear up with that sort of treatment, one of the things that

I have tried and which seems to be successful, is to have one of the ice coolers put into the room for a half hour before the patient enters the room, leave the windows closed, and the pollen that is in the air goes to the floor, and the patient can spend a very comfortable night in that room. Also I would like to suggest the use of large doses of viosterol with calcium in these cases. I think it is very effective.

REUBEN A. CRAIG, M.D., Kokomo: I started out in pediatrics thinking that most of the diseases were of the gastro-intestinal tract. I found that there were more of the upper respiratory tract and that they caused many of the diseases of the gastro-intestinal tract. It seems to me that there should be more cooperation between the pediatricians and the otolaryngologists because their work is parallel. More of these papers should be presented and the pediatrician should have papers from the otolaryngologist. I would like also to emphasize the fact that ear, nose, and throat men can use the pediatrician after he has treated the nose, throat and ear.

JAMES C. CARTER, M.D. (closing): I believe that the statement about the laxative or cathartic effect of magnesia was misinterpreted. I said a very small dose. One-half to one teaspoonful is sufficient. The idea is that about the day the youngster goes to the hospital, you will have a youngster cleaned out without dehydration, and the youngster is alkaline, if that amounts to anything. I did not state that we should give the youngster chocolate candy. I will go further than that, I tell mothers to give the child a dime's worth of chewing gum to use after the operation; tell the mother to throw the gum on the bed and let the child chew it. The child figures that somebody has done him wrong, after his tonsils are out. If he sees chewing gum, he will chew and limber up his throat muscles and will drink and eat. He probably never had a dime's worth of gum at one time. Incidentally, that is ideal treatment for mumps. Give him chewing gum and plenty of water.

In selecting June, I always tell people to go on Decoration Day, knowing that they won't go, but knowing that they will get there before the Fourth of July.

Putting a patient in front of the ice-box is not a cure, it is a test. For the past three years people have not had hay fever, they have had colds, because money did not permit trips to Michigan. One pediatrician said, "I know more about hay fever than any other man in Indiana." And when I asked him to tell us about it, he said, "Why, when I tell a patient that he has hay fever, I tell him the train leaves for Mackinac on Tuesday, Thursday and Saturday nights, and after that I do not see him again."



## ASEPTIC TREATMENT OF PRIMARY WOUNDS\*

F. H. JETT, M. D.  
TERRE HAUTE

In my hospital training I was brought up on chemical antiseptics. We believed in them and used them in profusion. In fact, the method of sterilizing the hands at that time was a five-minute scrubbing with a lye soap, then through alcohol and into saturated solution of potassium permanganate, decolorized with oxalic acid, following which we put on gloves with a 1:2000 bichloride solution.

Wounds were prepared about the same way for operation—a scrubbing, a bichloride pack for twenty-four hours, and copious quantities of various chemical antiseptics on the abdomen before operation.

Primary wounds were cleansed the best way possible and gone over with chemical antiseptics with a dressing applied. These chemical antiseptics were applied every day thereafter. These things were a part of me when I started to do surgery, and I had every reason to believe the procedures constituted the right and proper way of handling primary wounds.

About fifteen years ago I had trouble with infection of clean hernia cases, and made a survey to find the cause. It was found that these patients were given a bath when they entered, were put to bed, and shaved. The loose hair was removed, the abdomen was scrubbed, and an antiseptic applied. When they came to the operating room, another coat of antiseptic was applied, and the operation was performed.

In going over this carefully, looking for a way to improve, it occurred to me that if I were going to be operated upon for hernia, no one could get the groin and these parts as clean as I could myself. Immediately the order was changed to the ordinary bath when the case came in, patient put to bed and shaved. The patient was then returned to the bathroom, and under supervision was instructed to use soap, then wash it away, letting the water run off, and repeat this to satisfaction. Then the patient was put back to bed and the ordinary preparation carried out again. Our infection stopped with this. It was so striking that it was immediately applied to several other conditions, as perineorrhaphy, rectal operations and even abdominal operations in ambulatory patients, and was found universally satisfactory. Upon inquiry I find that today hernia cases and likewise abdominal cases are rather generally prepared as they were at the time of my hospital training.

Gradually since then I have been weaned away from my faith in chemical antiseptics, and this especially applies to primary wounds. It is not wise to say that chemical antiseptics is not good

when aseptic treatment is neglected, but I feel they are not necessary if the cleansing of the wound is done properly. If desired, chemical antiseptics may be used after the wound has been properly prepared.

Space does not permit me to mention the large number of chemical antiseptics that have been offered us for the treatment of wounds. All of them have had glowing articles written as to their efficacy. Many results reported in some of these articles were as wonderful as the radio advertisements, but when the Council on Pharmacy and Chemistry of the American Medical Association and various other learned investigators have gone through them, the miracles have disappeared. I think it is quite fair to select two for discussion—mercurochrome and iodine.

Iodine was one of the first to be proposed, and perhaps has stood the test of criticism better than any of the others. The harm done by weak iodine solution, 3 per cent and the like, undoubtedly is very small, but I believe it can be said that the benefits from weak iodine solution perhaps are just as small. Seven per cent solution of iodine undoubtedly does have a distinct effect on bacterial growths, but, on the other hand, it requires very much care in its use, and undoubtedly does damage to the living cell. In fact, this has given so much trouble in the preparation of surgical wounds that it has been necessary to reduce it to a weaker solution. I can do no better perhaps than to quote Simmons,<sup>1</sup> his summary and conclusion in his work-up of mercurochrome and iodine solution.

"Summary. 1. Three types of wounds—skin abrasions, superficial incisions, and deep incisions—contaminated with undiluted broth cultures of either staphylococcus aureus or streptococcus pyogenes were treated for various periods of time with solutions of iodine and mercurochrome, respectively.

"2. Application of tincture of iodine to 151 wounds contaminated with staphylococci resulted in sterile cultures as follows: abrasions 83.4 per cent; superficial incisions 83.1 per cent; and deep incisions 31.2 per cent; while its use on 59 wounds contaminated with streptococci resulted in sterilization as follows: abrasions 75 per cent; superficial incisions 80.9 per cent, and deep incisions 82 per cent. In brief, of 210 contaminated wounds treated with tincture of iodine, the cultures from 156, or 74.2 per cent, were sterile.

"3. Mercurochrome used under similar conditions caused relatively little reduction in the number of viable test organisms and failed to sterilize any of the 210 wounds.

"Conclusion. The 2 per cent aqueous solution of mercurochrome advocated for the first aid treatment of wounds is a relatively weak antiseptic. When used experimentally for the destruction of staphylococcus aureus or streptococcus pyogenes in abrasions or incised wounds, it was decidedly less bactericidal than tincture of iodine. Mercuro-

\* Presented at the annual session of the Indiana State Medical Association, held in French Lick, September, 1933.

chrome is comparatively so ineffective in the sterilization of contaminated living tissues that it should not be considered as a substitute for iodine."

(NOTE—Tincture of iodine or 7 per cent was used.)

Again, the conclusions of the report of the Council on Pharmacy and Chemistry of the American Medical Association<sup>2</sup>:

"It appears that mercurochrome, when once fixed on the surface of the tissue, develops no bacteriostatic action in contact with bacterial cultures.

"It penetrates only into the dead or dying mucous membranes of different organs, such as bladder, vagina and digestive tract, and it may diffuse through the cornea when in contact for a sufficient period.

"It does not penetrate the living skin but is fixed in the most superficial layers of the epithelium, and it does not penetrate or stain normal muscular tissue.

"It penetrates necrotic and dead tissue and stains them deeply and permanently.

"The tissue toxicity of mercurochrome is relatively low, but the 5 per cent aqueous solution is distinctly injurious as judged by excised ciliated mucous membranes.

"Mercurochrome cannot be relied upon to destroy bacteria that have penetrated into the living tissue of a wound or of the skin; it could do no more than disinfect the surface and the necrotic tissue. This limitation is shared more or less by all antiseptics so that no substance can be properly called a safe and certain wound antiseptic. No antiseptic takes the place of thorough cleansing and surgical treatment. When these are not practical, for 'first aid' or for very superficial wounds, antiseptics are probably better than no treatment at all. The antiseptic efficiency of mercurochrome is not outstanding, and for skin disinfection the aqueous solution is distinctly inferior. The absence of irritation may be an advantage, especially with open wounds, and for prolonged treatment; but its limitations should always be borne in mind."

However this is, it is not the purpose of this paper to discuss technically chemical antiseptics in secondary infected wounds, but to deal only with primary wounds.

There are three things very important in primary wounds:

1. Bacteria that may be introduced into the wound.
2. Foreign bodies of all kinds in a wound.
3. Damaged normal tissue.

In handling primary wounds, it is my opinion that these three must be taken care of very carefully. It is obvious, taking this view of the matter, that primary wounds must be cleansed very carefully. This is not possible, however, unless the wound is in some way rendered painless. When it was necessary to use general anesthetics properly to cleanse wounds, this was many times impracticable or unwarranted. Again, a nerve block or

regional block occasions enough pain going through the skin to make them undesirable.

For some time I hesitated to use infiltration block, fearing to introduce the needle through the supposedly infected part. Gradually I convinced myself that this could be done with practically no danger. Given a primary accidental wound, it is very simple to go in under the skin through the incision, pointing the needle upward, and make the block subcuticular, going entirely around the wound this way, making a regional block some distance from the incision. This can be done very nicely with three-fourths of 1 per cent procaine, and done with absolutely no pain. This should be done before the wound is cleaned up; in fact, before anything is done. This surface on which the wound appears (arm or leg, etc.) can be washed thoroughly with anything you prefer to take off dirt and grease, cleansing the part for a distance around, if on arm or hand, or cleansing the whole arm or hand. There is no pain to this, and it is my opinion that you may disregard the possibility of getting dirt into the wound. When parts need to be shaved, block is done before it is shaved. After this cleansing is done, the wound can be treated absolutely without pain.

The wound can be cleaned with green soap, a soft brush and sterile water until all foreign material is out, most of the injured tissue has been removed, and the wound has quite a healthy, red oozing surface. Then the damaged skin or damaged tissue that does not come away is trimmed out completely. After this the wound is scrubbed again in the same manner, and closed by sutures, with no pain. A sterile dressing is applied with no antiseptic. It is surprising how large a wound can be handled in this manner. Strange to say, after-pain is much reduced.

In large wounds, it is sometimes necessary to block the skin at its edge and again block it at its deep edge, or, in other words, when the skin has been undermined, to block at the point where the skin is normally attached to the subcutaneous tissue. Of course, it goes without saying that in very large wounds associated with fracture some sort of general anesthesia should be used.

In compound fractures with laceration, the fracture is turned out at its full extent, and it is cleansed and scrubbed the same way. This is applied to the ends of the bone, and damaged tissue removed; in fact, I do not hesitate to go into a joint, if the wound extends into it, and cleanse it in the same manner. Alcohol is used to remove fat, after which it is sewed up and a small drain inserted just through the skin to remove ooze. Again no antiseptic is applied.

I was taught by Emil Beck of Chicago, many years ago, that skin grafting was usually unnecessary. It was his procedure at that time to frame large surfaces of raw tissue with adhesive plaster. This was re-applied in successive dressings. The skin would come out under the adhesive plaster and



cover surprisingly large surfaces. Even at that time it was found that any antiseptic applied to this wound would destroy the natural reparative cell, and the wound would not cover over. Again, it was found that in the remainder of the wound not covered by the frame and dressed with gauze, the sticking of the gauze caused the wound to bleed and occasioned an irritation which would give a fibrous reaction; or, in other words, fibrous healing would take place before the skin had had time to come in and cover the wound. Paraffin gauze was tried and found harsh and heavy and occasioned bleeding at times. Finally, I have come to the use of vaseline gauze. The gauze is impregnated with vaseline, the excess vaseline is wiped away until the mesh of the gauze is open, and this allows the natural secretions of the wound to pass through onto the surgical dressing. One or two layers of gauze only are applied over the wound. The ultimate of this is, given a large wound with loss of tissue, it is closed as nearly as it can be without tension. Over the rest of the wound is placed this gauze that I speak about. The directions are that it should be changed frequently enough that it never sticks. In fact, wounds can be dressed for two months without one drop of bleeding at the time of dressing. This does as well as and perhaps better than the original process of Beck.

Gradually it has come about that I have had enough nerve to prepare and operate upon abdominal cases without antiseptic solutions. Cleansing baths are given and the ordinary preparation is made without antiseptics in the wards. The case comes to the operating table the next day, and an assistant carries out the scrubbing of the abdomen with a soft brush, green soap and water. It is wiped dry; alcohol is applied and wiped dry; ether is applied and wiped dry. Of course, the walling off of the wound is done as it was before. I have operated more than two hundred cases under this plan, and have been very much pleased with the results. The appearance of the skin of the abdomen when a case comes to the operating room and after this procedure has been applied is quite striking, and, if appearance goes for anything, it must be good.

I have been convinced that the use of chemical antiseptics in the preparation of and operation upon primary wounds is unnecessary. I feel very strongly that the dependence placed upon these to do wonderful things occasions the neglect to do the simpler things which are much more important. To see wounds come in, which have been treated and covered with various kinds of salves and ointments or with repeated coats of iodine and mercurchrome and the like, convinces me that a large part of the profession has an explicit faith in this treatment. It is not unusual even to find foreign bodies and much dead material in wounds that have been treated in this way. The excuse, of course, is that wounds cannot be properly cleansed without anesthesia, and the profession seems to think that local

anesthesia is a difficult matter. They do not understand how simple and how definite local anesthesia is when it is properly applied.

The question of whether or not chemical antiseptics do harm when applied to a primary wound still will occasion differences of opinion. There is no doubt in my mind that antiseptics will absolutely kill the blue line of new skin and retard healing.

Wounds that have been treated with mercurchrome, iodine and the like have a muddy discharge many times which makes me suspect they do some harm. I think it can be stated without fear of contradiction that if chemical antiseptics are to be applied, it is better to apply them after a procedure of this sort has been carried out.

I am still a convert in the use of chemical antiseptics in secondary and infected wounds, but begin to have doubts whether they are not carried to extreme, and if we do not expect these miraculous colors of yellow, red, blue, green and violet to occasion some legerdemain in the healing of the wound. It is sad to think how our dear old friends, silver nitrate, carbolic acid, iodoform, and bichloride of mercury, have suffered on account of their "B. O." and because they are not dressed in an up-to-date color.

## SUMMARY

1. Attention is called to the overuse of chemical antiseptics in primary wounds.
2. The general medical profession has a faith in chemical antiseptics which is not justified.
3. It is proposed that it is better to remove bacteria, foreign material and damaged tissue than to apply antiseptics.
4. It is concluded that primary wounds can be properly cleansed only when anesthetized.
5. The statement is made that local anesthetics can be used in a simple way by any one, and that general anesthesia should be imperative when local anesthesia is not sufficient.
6. It is suggested that skin grafting is done many times when good results can be attained in a simpler way.

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## DISCUSSION

JOSEPH H. CLEVENGER, M.D., Muncie: It has been aptly stated that the proper treatment of wounds should be regarded as the first qualification for a surgeon. This particularly concerns their immediate care. Also it is necessary that the wound be cleansed properly if a satisfactory result is to follow. Not only the first treatment of the wound but the surgeon's skill thereafter goes toward the determination of his ability.

One of the first things to be done in the treatment of a primary wound is to stop hemorrhage; next is to cleanse it, remove all damaged tissue, and fill in defects. The surgeon must do these things in order to have proper healing. I agree with Dr. Jett that it is not necessary to remove a large amount of tissue. Only the damaged tissue should be removed. When it is necessary to remove such a large amount of tissue that vital structures such as blood vessels and tendons are exposed, you may often be able to incise the skin parallel to the wound and slide it out across these exposed structures to the adjacent skin margin in order to cover the defect. The exposed surface between the edges of the new skin incision can be covered immediately with Thiersch grafts. You will be surprised at the result you will get from that procedure.

I believe the tendency is to do a secondary closure rather than close so many of these contaminated wounds at once and I believe the tendency will be more and more that way. As to the treatment of such wounds, Dr. Koch, of Chicago, recommends that they be left open for an average of two or three days. Even if there is some retraction of the cut tendons this can be overcome later.

Immobilization of the injured parts is a great help in healing and relieves much of the edema that is usually present. If immobilized they heal more quickly.

There have been a number of tests of the different antiseptics. Practically all antiseptics depend upon the coagulation of protein for their bactericidal action. This destroys living cells in the wound. No antiseptic has in its power the ability to destroy bacteria without destroying living cells.

I feel that the best way to take care of primary wounds is thoroughly to cleanse them with soap and water, remove any injured tissue and then, depending upon your own judgment, either close at the time or leave the wound open, closing it later when you are sure that there is no infection present.

JAMES Y. WELBORN, M. D., Evansville: It has been my experience both in the office and in hospital work to see the use of a great many antiseptics in preparing the hands as well as the field of operation. In this preparation, thorough cleansing is the most essential, and I do not believe we should depend on antiseptics, especially in preparing the hands. It has been twenty years since I have used any antiseptics in this manner, just depending on thorough cleansing. Occasionally, I have heard physicians say, "I have scrubbed so much today that my arms are red," and I have answered, "Then you are not fit to go into this operation, because if your arms are red they are irritated and might harbor some infection." Moisture on these surfaces provide a fertile field for bacteria. At times I use a brush for this scrubbing, but I think the same object can be accomplished without using such harsh material as a brush. The very fact that we have very few infections bears out my theory,

that to do away with all irritants is the best practice. I have been quite interested in what has been said in regard to the closing of all wounds. Regardless of the amount of laceration or destruction of tissue, it is always best to give it a skin covering if possible. I heard Dr. Charles Mayo say once that the first few hours after a wound is made, either by accident or in operating, there is thrown out a serum which under fair circumstances leads to rapid wound healing, and that if this is exposed to the surface or if it is changed by secondary operations, the best healing properties have been lost. So, the routine practice is to close all surface openings and depend on the system to take care of the injured tissues, and possibly slight infections.

E. V. WISEMAN, M. D., Greencastle: Dr. Moorehead of New York has definitely recommended in contaminated wounds the procedure that has been suggested here. In addition he places his sutures, usually silkworm gut or some non-absorbable material, loosely, and does not close the wound at the time of the repair, and after placing the sutures he applies boric acid packs for forty-eight or seventy-two hours. I think none of us would question whether boric acid packs would be injurious to the tissues. We know that it is still used in the eye, one of the most delicate structures in the body, and the eye tissues are not injured. It is easy after the edema has been relieved and drainage has taken place simply to tie the sutures that have been in place, without anesthesia. You will then usually get wound healing without infection.

F. H. JETT, M. D. (closing): I think it is safe to say that wounds heal when they are practically sterile, free of foreign bodies, and damaged tissue either recovered or is out of the wound.

We have a lesson in punctured wounds where we desire very much to open them up to their bottom. When we do this, regardless of the sort of treatment we apply, we do not close them, although we are prone to try to close other wounds that are open and expect them to heal.

I feel sure that wounds are not cleansed and prepared perfectly on account of pain, and that it has been considered to render them painless is a difficult affair. I am sure this is not true. I feel that the benefit from antiseptics is largely due to their cauterizing effect. This being true, the wound of necessity must get rid of the damaged tissue even if the bacteria should be killed.

Dakin's solution is very valuable because it does remove the detritus of damaged tissue and foreign body, and allows the wound to prepare itself for closure. I even doubt Dakin's solution as a bactericide per se. The disastrous effect which follows many times in simple wounds means that our method of handling wounds certainly should be improved, and I feel that this can be done in a very simple manner; but we will have to do differently than the nurse or the first aid attendant.



It is my opinion that the following conclusions are justified. Primary wounds that can be and are surgically cleansed and prepared should be closed, with the possible exception that temporary drainage should be used at times. Primary wounds that cannot be surgically cleansed and prepared should be left open and dakinized; at least, left open.

## SELECTIVE AUTOGENOUS VACCINE IN THE TREATMENT OF BRONCHIAL ASTHMA\*†

(A PRELIMINARY REPORT)

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The use of autogenous vaccines in the treatment of bronchial asthma is not at all new. The reason for inviting further consideration of this subject is that in the method of preparation and use of selective autogenous vaccines there is a marked departure from that now used in dealing with the preparation and administration of combined autogenous vaccines.

The search for the etiological factors that cause bronchial asthma has been going on for a long time; and during this time every conceivable cause has been investigated. Various pollens, foreign proteins, dander of animals, foods, etc., have all been considered as contributing factors. After consideration of all these etiological possibilities, one is often at a loss to account for the cause of repeated attacks in susceptible individuals. There can be but little doubt that certain pollens encountered in summer months cause what has come to be called seasonal attacks of bronchial asthma. Another factor in the etiology of asthma, which stands out rather impressively, is that of food. All types of food through sensitization tests have been explained as etiological factors.

Further physical factors such as extreme heat and extreme cold have been rather strikingly shown by Duke to be closely allied with the occurrence of bronchial asthma.

Citation of the facts just stated brings one to the conclusion that each year one sees a great number of people who have asthma which is not only seasonal but must be produced by extrinsic causes. In contrast to this group, one finds another group in which the asthma is not seasonal and apparently is intrinsic in origin. This classification of the etiology of asthma into intrinsic and extrinsic asthma prompts consideration of the factors which are inherent in some individuals, who react to ex-

trinsic causes, and in other individuals, who likewise are exposed to the same causes, do not react at all.

The introduction of the terms extrinsic and intrinsic into the study of bronchial asthma requires further explanation. It seems reasonable to assume that the two groups, seasonal and non-seasonal asthma, possess the same intrinsic cause. The difference, however, lies in the fact that the non-seasonal group does not require some external factor. The correlation of the extrinsic and intrinsic factors has been predominant in the author's study of this disease. Many cases have shown manifestations of the influence of the extrinsic element in the asthma associated with or following hay fever. Again, the extrinsic factor has been predominant in cases which were interpreted as food allergy. Still further cases of asthma which were ascribed to animal danders, etc., as etiologic factors give another class of subjects derived from extrinsic classification. In all these classes of the extrinsic stimulative factor with the possible exception of one or two individuals, the intrinsic factor was unquestionably identified as the specific etiologic agent. Where the extrinsic factor was identified as a food, a pollen or another agent of the intrinsic factor, a bacterial substance was proven as the true etiologic agent. Cases of the above parallelism, when thoroughly established on specific vaccine therapy of the selective autogenous type, showed no sensitivity to the extrinsic factors.

Foods to which the individual was previously sensitive could be taken without restrictions. Pollens previously shown to be stimulative of bronchial spasms could be encountered without precautions, and no asthmatic seizure produced. Such factors occurring so consistently in the authors' series of asthmatic cases rather insures the establishment of extrinsic and intrinsic factors in the etiology of this disease.

Weille<sup>1</sup> in an article entitled "The Surgical Treatment of Chronic Sinusitis in Asthma," has reported his observations of a group of forty patients selected from several hundred cases from the Anaphylaxis Clinic of the Massachusetts General Hospital. He states that about eighty per cent of asthmatic patients show some degree of sinus disease. The forty asthmatic patients were operated on for nasal conditions, including pus, polyps in the nose or sinuses, polypoid sinus membranes, antral cysts, thickened membranes, and cystic degeneration. He found that patients having extrinsic asthma received no benefit from sinus surgery. He concluded, however, that seventy-five per cent of the patients who had asthma associated with sinusitis showed a favorable local result in the nose following nasal surgery, but had only about a fifty per cent chance for the relatively long continued favorable changes in their asthma. Of the forty patients operated on, five were cured of asthma, nine markedly improved, six moderately improved, two

\* Presidential address presented by Dr. Beasley at the annual meeting of the Seventh District Medical Society, Plainfield, October 20, 1933.

† From the Research Department of the Mary Hanson Carey Foundation for Laboratory and Research Work, Methodist Episcopal Hospital, Indianapolis, Ind.

<sup>1</sup> Weille: *J. A. M. A.*, Jan. 28, 1933.

slightly improved, while eighteen showed relatively no improvement.

In the study of this report three very significant facts are noted: (1) that no children under twelve years of age were included; (2) that he regards that eighty per cent of asthmatic patients show some degree of sinus trouble; and (3) that surgery alone cured five cases of asthma out of the forty cases.

The fact that no cases were reported under twelve years of age leads to the conclusion that: first, as age increases, changes must occur in the upper respiratory tract that are conducive to the development of asthma; secondly, that removal by surgery of the pathological conditions is alone sufficient to cure or cause improvement in almost five per cent of the cases, and lastly that surgery alone failed to benefit permanently more than fifty per cent of the cases.

Therefore, it is apparent that the primary cause of intrinsic, as well as extrinsic asthma, is infection of the upper respiratory tract, since infection preceded and caused the pathological changes and evidently persisted in most of the cases after surgery was done.

One may now consider the statement that eighty per cent of the asthma cases have some form of chronic sinusitis. What about the other twenty per cent of cases that do not show pathological changes in the upper air passages and which require no surgical treatment? May it not be that this twenty per cent of cases do have low grade infection of the mucous membranes that has not caused marked pathological changes, yet is sufficient to cause them to react to the intrinsic as well as the extrinsic factors that produce asthma?

It may be clearly seen that asthma is primarily due to infection of the upper respiratory tract. Its cure must, therefore, depend upon the surgical correction of any pathological changes produced in either the nose or throat, and the immunization of the patient against organisms producing the infection.

Earlier in this paper it was stated that both seasonal and non-seasonal forms of asthma have the same intrinsic cause. The writers are inclined to believe that infection of nasal mucous membranes is common to both of these groups, and that pollen and various other allergic substances are the extrinsic factors that produce seasonal asthma.

With this view in mind it was necessary to search for the bacteria that were responsible for these nasal infections. The most satisfactory results are obtained when cultures are taken from the nasal passages alone, or, probably it can be more specifically stated, from the posterior nasal passages usually beneath the turbinates. Any one of the turbinates is a satisfactory site for culture. From these cultures individual cultures are made from each bacteria that is grown and is isolated. From each of these individual or isolated cultures, separate vaccines are made. When the vaccines are

completed the patient is given an intradermal test dose of one of these vaccines on alternate days, the alternating day allowed to intervene in order to eliminate the merging of one potential reaction with a subsequent one, without the patient having returned to normal between test doses. This procedure is continued until a test dose has been given from each one of these vaccines and the results tabulated. It has been found almost without exception, that only one will cause a local reaction at the site of injection unless organisms of the same strain are isolated, which have demonstrated culturally some slight differences in growth. If the test dose is given hypodermatically, or if the intradermal test dose is too large, not only will a local reaction be produced, but an acute exacerbation of the patient's asthma will occur within a period of from twenty minutes to ten hours later. It is sometimes desirable to give a slightly excessive dose, particularly if several strains of the same organisms are obtained which show varying degrees of allergic manifestation. That is to say, one or two organisms may be obtained through a culture which will give allergic manifestation at the site of intradermal injection, but only one of these organisms will produce a systemic reaction which is identical with the individual's symptom complex of asthma. Thus one sees that this selective autogenous vaccine is capable of having a direct effect upon the cause of asthma. He must have, therefore, one type of bacteria alone responsible for the post-nasal infection (causing the allergy), and the other bacteria associated with it are no more than symbiotic and are not etiologically responsible for the symptom complex called asthma. This association of bacteria in this mixed infection is comparable to the tubercle bacillus found in tuberculosis, and to the pneumococcus in pneumonia.

A vaccine is prepared from the culture which caused the reaction and the other vaccines are discarded. It is believed that the success of the procedure lies in the method of administration of this selective vaccine. It is also believed that the method of administration departs markedly from the methods heretofore employed. In order to prepare the vaccine for use, it is diluted to such strength that the initial dose produces no reaction locally or systemically. In some instances it has been indicated that a 1 to 120 dilution of a U. S. P. strength of vaccine be prepared and the initial dose begun at 0.02 or 0.03 cc. and this is increased daily by 0.01 cc. to 0.03 cc. increment until a mild reaction occurs. This margin of increase varies with patients and in some instances even a wider margin may be used. This increase must be necessarily small, and if the marginal increase is too small, less than 0.01 cc., the vaccine must then be returned to the bacteriologist and a higher dilution made so that the initial dose of 0.02 cc. and the increased doses of 0.01 cc. may be made with no precipitation of an asthmatic seizure in the early beginning series. This dosage is administered every



day, and in some instances twice a day, and yet in other instances three times a day, depending upon the negative phase of the individual in its duration and in its general-symptom-complex-characteristics. The patient is then carried from the weaker dilutions to the succeeding stronger dilutions as their tolerance is increased. The total volume of the largest dose of each dilution is never carried above 0.30 cc. At this stage a second dilution is used and the equivalent in this concentration is given approximating the last dose given in the weaker dilution. This procedure is carried on until one reaches in a highest concentration a point at which 0.01 cc. increment dose will produce a symptom complex of asthma, and on being repeated, produces the same initial prodromal symptoms of an asthmatic seizure. At this point the tolerance is established in the concentrated doses and the individual is dropped down to a dosage which is 0.02 cc. under the point of tolerance and is held at this point for at least a period of three to four weeks. After this saturation point in treatment is reached, the time interval in the dosage is then increased, and at first an interval of one day is allowed between the doses, then two days, then three days, and four days, and so on until one is giving the full dosage below the tolerance point every ten days. Then with this same time element intervening between doses, the tolerance dose is gradually dropped until 0.01 cc. is given, and then finally the vaccine is discontinued. This must all be accomplished without precipitating or having any attacks of asthmatic seizure occur. If attacks or reactions occur during the treatment, the return to a weaker dilution must be established at once and the patient's tolerance again re-established. This procedure is an extremely delicate one and cannot be placed in the hands of the average individual, because of the fact that too little attention has been paid to instructions of giving the vaccine allergenically from a therapeutic point of view. An immunity is not desired in this process, a process of desensitization with the patient's own establishment of immunity is paramount and evident.

It has been the practice to give injections of vaccines once every five days or once every seven days. Our procedure of giving a daily dose is entirely different from that of the past. One might ask, in the treatment of heart diseases, "would one expect good results if he gave a dose of digitalis only once every five days?" If desensitization is to be produced against asthma or any other infectious disease, it is apparent from our observations that daily increasing doses are necessary. It is the aim to establish each patient's tolerance for his vaccine, and to stop the increase of dosage at the point just before allergic reaction occurs.

The authors have found that if results are not satisfactory, it is not the fault of the vaccine, but it is in the method of the dosage given. In a small group of patients it has been noted that all of the symptoms of asthma are relieved, but that

they reoccur in about twelve hours. The authors have found in these cases that the results are much better if the dose is divided into two equal portions, one half being given in the morning and the other half in the evening.

The problem confronting the therapist in the application of these therapeutic procedures to general practice is of significance. The patient who is prostrated with long continued asthmatic seizures, and who is not fortunately situated in life, becomes the major portion of the problem. In this case frequent calls by the therapist to administer this vaccine becomes too great a financial burden. Later, in these instruments, the poor patient, as well as the well situated patient, becomes weary of frequent visits to the physician's office over long periods of time. To meet this difficulty the authors have taken a leaf from the book of the therapist who treats diabetes with insulin. Each patient is provided with a syringe and is carefully instructed in every detail of the treatment. After a few treatments the vaccine is given to the patient for self-administration. He is required to report daily by telephone, and in this manner he is closely supervised until the proper dose is attained. This program requires that the patient should be seen once each week. Now, after a period of two years no unfavorable results have been observed in a large number of patients.

The system of use of the vaccines in treatment of these asthmatic conditions is not an unusual one nor an exceedingly intricate one. Many treatises appear in print in regard to the effective use of vaccines in every form; however, few therapists are able to report constant results with the use of the same type of vaccine. Hence, discussions have arisen as a result of the controversy which has come about after the attempted use of a certain technique in vaccine therapy.

The main etiologic factor underlying the failure to obtain results in corroboration of each other's work lies in the principle that the parallelism between immunity and allergy is indefinitely and only vaguely known. Treatises on the subject of allergy and immunity remain securely remote from any definite or concrete statement. The differentiation between these two states is yet very obscure and is difficult to understand. Statements are found in which one writer says that "allergy is one form of immunity," but the differentiating factor between these two conditions is not made clear. Therefore, with the general information being highly theoretical, it would not be presumptuous to impose upon the reader a theoretical view which might be called original.

If one proceeds from the premise that most of the bronchial asthma is of bacterial etiology—a result of an infection—one may be led to a rather logical conclusion, that the following observation may be justifiable: first, the portal of infection which has been determined in these cases and definitely pointed out as a primary source of the

infection, seems to be in the upper respiratory tract; second, the resultant effect upon the bronchial musculature and the lung parenchyma itself is entirely a secondary process. This is quite definitely shown from cultures, both from the upper portions of the tract and from the material excreted from the secondarily involved parenchyma. The cultures from the first named source, that is to say, the upper part of the tract, if diligently and carefully made, usually surrender the organism which will experimentally produce asthma when the patient is entirely free from all symptoms. Those cultures which are made from the material which comes in contact with the bronchial mucosa, and the alveolar walls, almost always yield no organism which will produce asthma experimentally, or if an organism is obtained, it is highly attenuated and produces only slight results in its administration in vaccine form. Conclusion from this statement may be left to the imagination, although it seems probable that the primary source of the infection is rather definitely established.

It might be well to call attention to the fact that the location in which this invasion occurs is not of the type of tissue which produces a great degree of immunity reaction. If sections are taken through this tissue, one finds a low grade type of infectious reaction present, non-suppurative in type. Occasionally low grade suppuration, but in most instances a cicatricial or atrophic type, with a resultant destruction of glands and hypertrophy of the blood vessel walls, and a reduction of the lumina of the blood vessels, is observed. This means there has been a gradual withdrawing of circulation, which in turn means a gradual withdrawing of the immunological protective factor. One will agree that the most complete results are obtained in the immunological production, which occurs in a site in which there is a definite potential increase in blood supply and in one in which the potential proliferative cellular activity against the invading organism becomes quite massive. In these sites, usually healing takes place very rapidly with removal of the debris and the relatively small formation of cicatricial tissue. This protective reaction does not appear fulfilled in the foci invaded in the upper respiratory tract, and only a partial protection occurs at that site. The offending foci become walled off to an extent only that they do not destroy the individual host. They remain constantly present and the individual who possesses them absorbs the stimulative antigens without an appreciable or proportionate increase in antibody formations. The result is that the titer of the antibody protection unit reaches a maximum which is not sufficient to eradicate the infection. This titer increases to such a level that it is impossible to reach higher concentration in the process of total elimination, but this concentration is not sufficient to protect. The infection continues with a constant stimulation by the antigen, that is to say, the bacterial toxin is

constantly present, but no increase in antibody titer results.

Under this unproductive stimulation, an allied substance is produced in the immune processes. This is a distorted type of antigenic substance against which the entire system protests, and the result is that a condition of allergy or sensitization (allergic positive phase) is produced. It seems that in these allergic conditions, total stimulation of this factor becomes quite constant. If, during this time, the individual becomes more and more sensitive (i. e., allergic positive phase) and if a stimulation of a slight superimposed infection, such as a cold, i. e., (immune negative phase) is added to the constant infection, the residual barrier is broken down and a more profuse absorption occurs (stimulation of allergic positive) with the resultant precipitation of bronchial spasm in the usual picture that one sees with a bronchial asthma. As the superimposed infection recedes, i. e. (immune positive phase) protective barriers are again re-established and the bronchial seizure gradually subsides and for the time following this process, (i. e., allergic negative phase) the individual remains relatively free from any bronchial attack. The secondary infection superimposed upon the residual infection often stimulates a paroxysm of the bronchial spasm associated with the initial process. As the secondary infection becomes more permanent (i. e., immune positive phase) and immunity to the initial process is lowered, the titer of the allergic antigen (allergic negative phase) becomes reduced to a relatively low level. Thus no asthma is experienced. Coincidentally the ascending titer of the active infection (immune positive phase) which is superimposed on the residual infection, causes the allergic titer to be lowered at a rapid rate. Thus a negative phase of allergic titer is established and freedom from asthma is observed. The individual, after recovery from the acute infection (i. e., immune positive phase), becomes relatively established in the negative phase of allergy, but with this establishment of allergic negative phase, the old residual infection again begins its process of stimulating effect, and it is only a short time until the immunological titer (immune positive phase) of the superimposed infection is totally destroyed and the allergic titer assumes its former proportions (allergic positive phase). So the cycle progresses. One finds that with ordinary vaccines a temporary respite from the bronchial spasm may be secured, but no permanent results can be secured by the prolonged use of a non-specific type of preparation.

If these observations can in any way be accepted, the relationship between immunity and allergy does not appear to be obscure, and the therapy which might be instituted, if based upon these observations, should give in a high percentage of cases uniformly good results. In other words, to summarize, it might be said that in the cases which have demonstrated relatively definite and specific bacterial invaders, the individual has been shown to



be allergic to the chemical substances included within the bodies of these organisms. The exotoxin has already been definitely excluded by previous experimental evidence. In the patient who is suffering from this bacterial invasion there is a high concentration of allergic antibodies (allergic positive phase) against the specific bacterial substance, which, when introduced precipitously will produce a paroxysm of asthma in an amazingly short time, a few minutes to a few hours. If this substance be introduced intradermally, or in more exact words, if the patient having bronchial asthma is given an intradermal dose of the allergic antigen while in the positive phase, asthma will invariably result in an amazingly short period. If specifically isolated, allergenic substances in the form of a bacterial vaccine is administered at regular intervals in the negative phase of the individual's bacterial invasion, this individual will remain free from any sensitivity against this substance and consequently will be free from any asthmatic seizures. Exhibition of these allergenic substances, bacterial vaccines, to a patient who is in the positive phase, invariably produces a bronchial spasm in varying degrees of severity, depending on the size of the dose, but in order to determine the process whereby the vaccine must be given, the individual must be tested as to duration of his negative phase. There must be determined, also, the length of the negative phase. The duration of the negative phase is a variable factor and may vary from a few hours to several days. In long treated cases, it is definitely shown by the observers that the negative phase may become an incredibly short space of time, so that all treatments with the vaccine must be abandoned until the regular sequence of negative-positive-phase-cycle has been again resumed. This cycle must return to the normal which appears adapted for this individual. In other words, even though one has determined the negative phase of the individual, and has administered the dosage in accordance to the negative phase duration, and with good results, even to the prevention of any bronchial attacks, there develops occasionally a time when the individual apparently has a negative phase that is of such short duration that it is almost impossible to administer any allergenic substances within that short period which will prevent bronchiogenic seizures.

In these cases, all treatments must be abandoned with total rest from all vaccine therapy. As we have pointed out before, after the determination of the duration of the negative phase, it is best to teach the patient self-administration of the vaccine. With very little training and instruction, the patient realizes very rapidly when he becomes allergic to his allergen. Although he may not express it in these words, he will vary his dosage according to the duration of this interval. Contrary to the usual teachings which have been given on vaccine administration, long intervals and large doses will wreak havoc with the allergic patient. Smaller

doses and frequent intervals are the keynote of most successes.

One hundred forty-three cases have been treated, and of this number eighty per cent have shown remarkable benefit. After a few injections have been given the distressing symptoms begin to abate, and in a short time the vaccine alone is sufficient to keep these patients free from the distressing symptoms of asthma. About twenty per cent of the patients have failed to show improvement. This group represents patients who are in need of surgical treatment to improve drainage and ventilation of the upper air passages. The writers therefore believe that each of these patients should be examined and, if necessary, be treated by the rhinologist in order that any pathology that disturbs ventilation or drainage be corrected and all foci of suppuration be drained.

The foregoing discussions are based on recorded observations made on the number of cases reported. The classification of these cases in their allergic reactions to extrinsic factors of etiology will be later presented. The characteristic flora of the average case is yet under compilation and requires too much elaboration to be presented at this reading. After five years study of these flora (begun in 1929) many interesting factors come to light which will again be presented later. The reaction of each individual case to extrinsic factors before and after treatment with these specific selective autogenous vaccines is well under progress. The main object of this report is to present a new method of administration of vaccine together with the use of selective vaccines in an allergic condition, known as bronchial asthma.

The details of the use of these agents were completed in 1929 and showed uniform results to one of the authors. Since 1932 the other of the authors has applied the laboratory-perfected treatment and preparation to the private practice with corroboration of the laboratory's results.

#### CONCLUSION

The authors attempt to present the following facts in regard to the treatment of asthma with selective autogenous vaccines:

- (1) Carefully prepared selective vaccines are practical in private practice as well as effective in the treatment of bronchial asthma.

- (2) The method of vaccine therapy as commonly used and understood among the profession is not applicable to the use of selective autogenous vaccines in bronchial asthma.

- (3) The selective autogenous vaccines cannot be used without special instruction to both the physician in attendance and the patient.

- (4) Improvement in the patient's condition will be noted in 80-85 per cent of the cases, if these instructions are followed to the letter; otherwise,

if a deviation is made from this schedule intensification of the asthma will result—no cures are reported.

(5) No medical treatment is of value until the indicated surgery is accomplished.

## CHILDHOOD TUBERCULOSIS\*

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A patient who comes to a physician, complaining of symptoms, and who upon examination shows definite signs of pulmonary tuberculosis, has in all probability come too late. Only fifteen per cent of patients diagnosed in the tuberculosis clinic are minimal cases. In the control of tuberculosis interest has for some years been focused on the child because, from certain basic facts regarding pulmonary tuberculosis, it has been seen that the foundation for all future tuberculosis is laid well before the twentieth year. If we can detect, by the means at our disposal, those children who are infected, we should be able by suitable procedures to protect them sufficiently to prevent their subsequent breakdown.

We know<sup>1</sup> that children living in household contact with persons who have a positive sputum show certain pulmonary infiltrations long before they have symptoms or physical signs; and we also know<sup>2</sup> that the majority of these lesions may be so treated that the child may never be consciously ill from them. The advantages of such a policy are too obviously ideal to need emphasis.

The almost universal distribution of the tubercle bacillus makes it well nigh impossible for a child to grow up without having received an infection with this organism. The term childhood tuberculosis is used in referring to lesions in the lungs and intrathoracic lymph nodes which result from a first infection. It has certain definite characteristics. An area of inflammation develops where the bacilli settle in the lung. This area may be quite small or it may involve the greater part of a lobe and in either case the regional lymph nodes are quickly involved and become enlarged. Regardless of the mode of infection, whether it be by inhalation or ingestion, it is characteristic of this first infection for the bacilli to find their way to the hilum of the lung. The parenchymatous lesion may heal and almost entirely disappear, leaving only a small area of calcification, the so-called "Ghon's Primary Tubercle." In a comparatively short time the lymph nodes may show calcium deposits which is a type of healing commonly occurring in children and seldom in adults. The primary lesion may be located in any part of the lungs but is most common in the

lower lobes and after the initial clearing may be difficult to demonstrate even by means of the x-ray. Caseous lesions tend to become calcified and cavitation is much rarer than in the adult type.

X-ray findings<sup>3</sup> in cases of primary tuberculosis vary greatly in appearance depending on the location, extent, and phase of the reaction at the time the film is made. They may show (a) a diffuse exudation, pneumonic in type, from a few centimeters in diameter to the extent of an entire lobe; (b) a small nodule in the lung, with or without visible lymph node masses in the hilum; (c) circumscribed masses of caseous nodes projecting out from the mediastinum (unless the nodes are sufficiently enlarged to extend well out, it is difficult to demonstrate them in the ordinary anterior-posterior view); (d) masses of calcified tracheo-bronchial lymph nodes without an obvious lesion in the lung (these are best seen in films taken in the oblique position).

The observations of Pirquet<sup>4</sup> of Vienna showed that 55 per cent of children were infected by the fifth year, 81 per cent by the tenth year and 93 per cent by the thirteenth year. In Philadelphia,<sup>5</sup> in a group of apparently healthy school children, 90.2 per cent were found infected by the eighteenth year. In Louisville<sup>6</sup> white children up to thirteen years of age gave 35.6 per cent positive reactions to the Mantoux test and negro children 42.7 per cent. Among the white children 2.3 per cent and among the negroes 4 per cent were infected before the fifth year. In some recent work on apparently healthy white and colored pre-school children in Jefferson County, Kentucky, I found that 6.1 per cent were infected.

### Pre-School Children Reacting to Mantoux Test:

	Number Tested	Positive	Percent
White Children.....	329	18	4.5
Colored Children.....	36	8	22.8
Total .....	428	26	6.1

In all instances we used the Mantoux, intracutaneous test, and gave 0.1 mg. of old tuberculin. The characteristic reaction consists of the appearance of an area of redness about the size of a quarter, sometimes larger, with some slight swelling and induration within forty-eight hours after injection. There is little or no pain and only in rare instances has the reaction been severe enough to cause any malaise. The tuberculin test depends for its usefulness on the fact that in from two to four weeks following infection the individual develops allergy and the positive reaction is merely the reaction of an allergic individual to the tuberculo-protein.

The tuberculin test is a very simple, harmless procedure from which we gain valuable information. It is not practicable to advocate that all children have periodic x-ray examinations of their

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chests. By the universal application of the Mantoux test we are able to find which children have been infected. All children reacting positively to the test should have further examination by means of the x-ray. The tuberculin test simply tells us that the child has been infected, not when or how severely. Only by means of the x-ray can one judge the extent of a lesion and the amount of injury the child has sustained. The importance of the test is in direct proportion to the immaturity of the child and the severity of the reaction. From a positive test in an infant one may assume the presence of open tuberculosis in the home and that alone should point the way to finding the source of the infection so that the contact may be broken and the infant spared further infection. Tuberculosis in infants and children was formerly given a grave prognosis, but we have seen that children handle their infections very well if the continuous reinfection is prevented. However, an infant exposed to repeated large doses of bacilli due to living in contact with an open case will nearly always develop a generalized infection which will result in death.

SYMPTOMS

When we come to discuss the symptoms in childhood tuberculosis we find that the old criteria fail us completely for cough, blood-spitting, and night sweats are rare. Fever is unreliable and frequently not present except in the severe generalized form of the disease. A child in what appears to be perfect health may harbor a serious lesion. The one symptom which should arouse suspicion is undue fatigability. Underweight does not seem to be a factor in the detection of the disease other than that it is the sole cause frequently for which the child is brought to the physician, and no examination of a child should be considered complete until the child has had a tuberculin test and, if positive, an x-ray as well. To prevent needless alarm we stress to the parents that a positive test indicates infection only and not necessarily disease.

The greater proportion of the children will fall into the group which show only calcium deposits in the lungs or tracheobronchial lymph nodes. These children need little or no active treatment but should be placed on a definite regimen. They are permitted to attend school, as they are not a menace as a source of infection to the other children. They should have a daily rest period, go to bed early at night, and refrain from strenuous or competitive athletics. They should have a quart of milk a day, and during the winter months they should receive two to four drams of cod liver oil after meals. The child with an exudative process requires strict bed rest until absorption has taken place regardless of the length of time required, whether three or six months or longer, to achieve this end.

Having found one infected case in the family, and having determined the amount of involvement

and instituted the proper treatment, we must not feel that our responsibility is discharged. Finding one infected child in a family calls for the testing of all the children in that family for there may be a common source of infection in the household. Finally, all close contacts of these children should be examined in an effort to find the probable source of infection.

We know that infection produces allergy. In laboratory animals Krause<sup>7</sup> has shown that infection confers at least a relative immunity. Authorities at present are not in accord as to whether allergy and immunity go hand in hand. We see patients with unmistakable calcification in the lungs who have a negative tuberculin test, showing that allergy has disappeared although it must have been present following the first infection. Myers<sup>8</sup> reporting on a ten year survey at the Lymanhurst School for Tuberculous Children states that it appears that the longer the first infection can be prevented the better, for they have noted that it is only children showing first-infection type of tuberculosis who later develop the adult type. Further, he states that young adults who become positive reactors after exposure do not develop "galloping consumption" as was formerly thought.

Children may be classified under the following headings:

- (a) Negative: All those negative to 1 mg. of tuberculin and having no abnormal x-ray findings due to tuberculosis.
- (b) Primary Tuberculous Infection: All those who react positively to tuberculin but on x-ray show no demonstrable lesion.
- (c) Childhood Type Tuberculosis:
  - a. Those with inflammatory lesions.
  - b. Those showing calcium deposits.

Most children with childhood tuberculous infections require observation rather than active treatment.

We must conclude that the routine tuberculin testing of children is an important phase of preventive medicine, as it not only leads to the discovery of the latent and active cases of pulmonary tuberculosis in children but also to the probable source of infection which is usually an open adult case in the home.

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## LYMPHOGRANULOMATOSIS INGUINALIS\*

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Lymphogranulomatosis inguinalis is an indolent, inguinal, subacute adenitis of venereal origin, preceded by a primary cutaneous lesion in the area drained by the involved glands. Because of similarity in terminology this disease is sometimes confused with granuloma inguinale. However, granuloma inguinale is essentially a cutaneous disease, whereas lymphogranulomatosis inguinalis is essentially glandular.

Though known in tropics for over fifty years, recognized in Europe for the past two decades, and described in other parts of the United States in the past few years, this report of twenty-four cases observed at City and University Hospitals in Indianapolis, is the first to be studied in Indiana.

Because of its earlier apparent limitation to tropical countries, climate was thought to have something to do with lymphogranulomatosis inguinalis. This led to studies of seasonal incidence with the result that several reports show around 70% of their cases occurring between March and September. Our series, however, showed 58½% between May and October and 41½% between October and May.

The condition is more frequently observed in males than in females, explainable possibly on some lesser susceptibility of the female lymph-glandular apparatus, or the fact that in females the deeper pelvic chains are involved, giving rise to no early symptoms. Germans have shown that some of the previously undiagnosable rectal fistule and so-called ano-syphilomas of Fournier are latent manifestations through involvement of pelvic chains or of glands of Gerota by this disease. This series shows two females affected, or 8½%.

Lymphogranulomatosis inguinalis is a disease of adult life with its greatest incidence during the period of greatest sexual activity. In this series ages ranged from 17 to 52 years with an average age of 28.6 years. Thirty-three and one-third per cent occurred in the five year period of 20-25 years, with 83½% occurring under the fortieth year. The only cases reported in children, of which I know, were in *Klinische Wochenschrift* for August 13, 1932. There, two female children, ages 6 and 7 years, were reported, who were sleeping in a bed with a known infected female cousin.

Sixty-six and two-thirds per cent of the series were single or separated from marital partners. Of the 33½% who were married, all admitted extramarital exposures. In our series, but one wife living with an infected husband is known to have contracted the disease from him. Thus there is a demonstrable partner case spread of 12½%.

These cases were divided equally between white and colored patients.

Four types of primary lesions have been described:

- (1) a superficially ulcerated herpetiform lesion;
- (2) a papule;
- (3) a nodule;
- (4) an intra-urethral lesion, exhibiting itself as a moderate secondary urethritis.

The primary is most frequently observed under prepuce, in sulcus coronarius, in folds of labiae, or in vagina, as a small clean lesion. It is usually subjectively free from symptoms, transitory in duration, and for these reasons often unnoticed. In 45.8% of this series former attending physicians' records showed, or we personally observed, a penile lesion. One patient showed a lesion more typical of a mixed chancroidal-leucic infection. Darkfield repeatedly has been negative, though serology once repeated shows Wassermann 2 plus, 1 plus, negative, and Kline 4 plus. This may develop into a frankly serologically positive leucic, showing another venereal infection to have been simultaneously contracted, mixed with his lymphogranulomatosis inguinalis. However, reports include cases which early show weakly positive serologies that later become negative without treatment, and never show thereafter serological or clinical findings of syphilis. One such case we had. Another case showed a lesion clinically typical of chancroid, with the associated inflammatory glands found in that disease. Darkfield and serology were negative. This patient was lost to observation and the eventual outcome is unknown. These cases show the necessity of considering this disease mixed with other venereal infections. A number were seen with coexistent gonorrhea. Seven patients or 29.2% of the series, were seen with frankly positive Wassermans. In four of these, syphilis antedated this disease, one contracted syphilis later, and in the other two we were unable to ascertain when leucic infection occurred. Recurrent herpetiform eruptions of genitalia, during the course of the disease, have been reported and 8½% of the series showed this. Twelve and one-half per cent of the series, all showing herpetiform type lesions, which we classed as primary, possibly should fall also in this group, as they were observed as existent sixty, thirty, and twenty-one days respectively, after glands were noticed. Twelve and one-half per cent of the series noted primary and glandular swelling appearing simultaneously. Twenty and eight-tenths per cent of the series noted or showed primary present from two to twenty-eight days prior to gland process, with average of seventeen and one-half days. No accurate time between infecting coitus and primary appearance was elicited.

The most frequently involved glands are those of the groin lying over the middle third of Pouparts ligament, though axillary and cervical glands are reported in extragenital infections. In this series

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58½% showed unilateral inguinal involvement; 41½% a bilateral inguinal process; 45.8% extension to iliacs, and 16½% spread towards fossa ovalis chain. Early, individual, pea to walnut sized, hard, freely movable glands can be palpated. Peradenitis gradually envelops and binds glands into a mass which continues to grow, reaching hen to goose egg size and being lobate to palpation. Early, overlying skin is freely movable and faintly erythematous, but this gradually becomes bound down from beneath and of a violet-blue color. Small, multiple areas of softening may appear and at these points fistulae may form, emitting first a thick grayish-yellow abundant pus, which later becomes thinner and less abundant. Fistulae may coalesce, but never phagadenize. At this stage they may remain months to years, sometimes regressing of themselves. Fifty per cent of our series fistulized following either spontaneous rupture or surgical lancing; 41½% of this fistulized group remained under observation until healed, the time required for healing varying from 92 to 577 days from onset to healing, with an average of 278 days.

Fifty per cent of this fistulized group left observation within 68 to 617 days after disease onset with fistulae still draining. One case, 8½%, of the fistulized group remains under observation, being 30 days from disease onset. Of the total series, 46% were seen through to complete involution. Of the healed group, 54.5% received treatment thought to have effected healing. One patient, or 9% of healed group, did so without any treatment and without fistulizing in 88 days. Fifty-four and five-tenths per cent of this healed group had fistulized prior to healing. These cases which had fistulized prior to healing required 250 days as against 71 days for those who had not fistulized; 12½% of series were practically healed at last observation, the disease having lasted 110 to 617 days; 41½% of the total series disappeared from observation on the 12 to 130 following onset.

During the time the glands are enlarging, temperature may be elevated, subfebrile or normal. Usually the patient complains of anorexia, emaciation, nausea, vomiting, weakness and rheumatic pain. No generalization of adenopathy is noted. Pain may be marked in some cases but usually it is more a complaint of aching or stiffness on walking or moving affected area with tenderness to palpation. One of our patients showed a purpura simultaneously occurring with onset of glandular swelling, while another, after fistulae had healed, showed an erythema nodosum as some observers have reported. White blood counts were normal to slightly elevated with high monocyte count in some cases. In three of these cases we were able rather closely to check periods elapsing between infecting coitus and appearance of glandular swelling which are shown as twelve, forty, and forty-nine days respectively.

Pathological sections of these glands show numerous small, round, oval, or stellate abscesses

with a central area showing necrosis, but not caseation, in which there are fine, granular detritus and corpuscles, highly receptive to nuclear stains in leucocytes and free in tissue. Langerhan giant cells are present at abscess border. Here begins a narrower or broader surrounding zone of epithelioid cells, often palisaded. The whole gland is set through with granulation tissue consisting of lymphocytes, plasma cells, fibroblasts and epithelioids. All is bound in a peradenitis and vessel intimas thickened. Variations of this picture occur after rupture or lancing has allowed secondary invaders to enter.

Etiology is unestablished though it is not syphilis, tuberculosis, or Ducrey. In one of our patients we isolated a gram positive bacillus. Suspensions of this gave positive cutaneous reactions in non-infected as well as infected individuals. Thus probably it was not causative.

All of these patients showed positive Frei tests. In this test 1/10 cc. of the antigen is injected intradermally with positive wheal resulting in 48 to 72 hours. This is now accepted as completely diagnostic.

Of this series, 62½% were, or had been, treated by surgical methods of complete or partial extirpation, lancing, or aspiration. Of the healed cases those who had complete extirpation required an average of 61 days from operation to heal. Those who were excised without any previous lancing required 30 days as against 123 days in those that were excised after previously having been lanced or partially excised. Certainly this would speak for total extirpation as against any partial removal or lancing. All can be accomplished by aspiration in relieving tension without producing fistulae.

Since surgeons cannot excise all the deep involved glands, medical methods are being sought.

Seven patients of the total series have received medical treatment directed against this disease, four receiving tartar emetic and three receiving Fuadin. Of the four receiving tartar emetic, two had fistulized and the other two were early cases prior to fistulization. The two fistulized cases were not affected by this treatment, while one of the non-fistulized cases placed on this therapy had already markedly regressed prior to medication. Therefore the question arises as to how much of an effect was brought about by treatment. The other patient was practically healed 96 days after starting tartar emetic and was then lost to observation.

Three patients are now being carried on Fuadin and one has resolved markedly, though any statement on this treatment would be premature.

## DISCUSSION

A. S. GIORDANO, M. D., South Bend: As Doctor Dalton has shown, this disease is more widespread than we have believed. The etiology is of course

unknown. Many excellent bacteriologic studies have been made of these lymph nodes previous to suppuration, and all have shown negative cultures in most varied types of media. Animal experiments suggest that we are dealing with a filtrable virus because the disease has been reproduced in monkeys and rabbits.

There is not much to add to the paper presented, but I might touch briefly on some of the points that Dr. Dalton brought out which are of greater interest to the practitioner, and one is the interpretation of the positive Wassermann reactions which so frequently occur. Interpreting this as non-specific and observing the patient would avoid many errors. In many venereal diseases, false weak-positive Wassermanns are very common and one must be careful to interpret them as specific until proven otherwise.

Another point is the biologic significance of the Frei test. In many ways the Frei test reacts like other allergic reactions. On the other hand, it must be regarded by itself as a biologically non-specific reaction because we are dealing with an antigen which may be a composite inflammatory exudate and not a true antigen. On the other side, the Frei reaction behaves like tuberculin reaction—when once the patient is infected he will react many years after the disease is healed. The literature shows that the Frei test is not quite 100 per cent. There are two different viruses that give rise to lymphogranuloma inguinalae and are subdivided into A and B.

I am much interested in the results Dr. Dalton obtained from treatment. Many of the clinicians in the past have advised complete surgical removal of the suppurating glands in order to cut down the length of time of the illness. Some of these patients have even been treated with the Frei antigen with variable results. Tartar emetic in our limited experience has given better clinical results than any other method so far tried.

Another very interesting point was the frequency with which Dr. Dalton was able to demonstrate the primary lesion in the genital tract. So many times when the patient comes to you the little papule has already disappeared. In his cases it appears to have been very easily demonstrable.

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## AN ECONOMIC PROSPECT FOR THE PHYSICIAN\*

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"We live in a world where we get what we want," says an economist. "In spite of appearances we generally get what we want." Economists use the phrase "effective demand." "Men want automobiles

and a new industry springs up. Men want moving pictures and they get them. Our wants are powerful and produce results. We live in a world where the deep persistent wants of life are met."

In our recent experience supply has swamped demand. The automobile has reached the saturation point and the super-saturation of the medical field is acutely distressing. What does the medical profession want? What do the American people want of the medical profession? What shall be the "effective demand" which shall create a new deal? Who will lead the medical profession to new heights of service? Will it be the plutocrat who has accumulated surplus through the control of a useful commodity, or will it be the practitioner of medicine who has always given his best to the service of the sick and unfortunate?

No one will claim that the medical profession has remained static even though our reactionaries have entrenched themselves deeply in the soil of tradition, resisting progress with all the strength they can reinforce by conservative argument and by an intense desire for the protection of the sanctity of our guild.

Charlatanism has walked step by step with the development of medical service through the ages, but organized group infringements upon the medical field have assumed hitherto unknown proportions during the period of service of the physicians.

The changing order has been slowly gaining momentum attaining such speed that we are now fearful lest the whole social machine may jump the track. Whither medicine no one really knows—but it promises to become less individualistic and increasingly dominated by governmental influence.

Every year approximately five thousand men and women enter the profession of medicine in the United States. These men and women have spent from twenty to twenty-five continuous years in study. Most of them have had eight years in college, four years in acquiring a bachelor's degree and four years a medical degree, and one or two more in a required hospital internship, before a license to practice medicine can be secured.

These licentiates are twenty-eight or more years old. They start their careers handicapped with a one-sided maturity, that includes no knowledge of economics, very late in a knowledge of self-support, very late in ability to support a home and family, enter a profession which offers a very small financial promise, following the lure of an opportunity for social service, or an interest in clinical research or the rewards of the interest itself developed by scientific study.

From an economic point of view there are no young physicians; and except for the fact that at twenty-nine or thirty years of age they have no patients, their problem differs slightly from that confronting most of their elders, seventy per cent of whom have annual incomes of less than ten thousand dollars and twenty-two per cent of whom have annual deficits.

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They are crowding into an already overcrowded profession, which now provides one physician for every 780 persons in the United States, a ratio greater than in any other civilized country, nearly four times the ratio of one to 2890 in Denmark where very adequate medical service is said to be maintained. They are entering a profession which is now giving the people of the United States an average quality of medical service better than ever before, but which fails to satisfy some well meaning people whose desire for promotion of general welfare is interpreted for them by philosophers who have not arrived at their decisions through the processes of medical experience and who desire to complicate the evolution of medical service by loading it with non-medical machinery involving the authority of the State.

Some of these dilettantists who know very little of the daily, practical, priestly, confidential, personal relations of physician and patient have no fears about their ability to regulate the lives of those who live with this problem twenty-four hours of every day. The mechanics of medical service seem to be their chief interest. Under the aegis of the promise of medical care for all people at low costs, they plan for regimentation of physicians into panels under government control, or into groups with group payment. They would measure ideals with a mechanical yardstick, and they deify statistics. They would load elaborate bureaucracy and the sickness bill upon the overburdened taxpayer with very little regard for the quality of medical care and very little regard for the physician who has always been the only double taxpayer concerned in the care of the sick because in his hospital service he serves the sick poor free.

The president of an important foundation, who is also the chairman of the board of a great farm products company, recently announced that nothing less than complete compulsory health insurance is the present objective of his foundation. The issue is final and definite. What are we going to do about it? In America every man, woman, and child has seven days of illness annually. Since the institution of Health Insurance in England the average annual illness has been extended to seventeen days. In America under Workmen's Compensation industrial diseases have increased. In Europe under Health Insurance, they have multiplied immensely. Under Health Insurance mortality has not decreased. We know something of malingering under Workmen's Compensation. Under Health Insurance it has assumed the proportions of national scandal. Under Health Insurance there has been no increase in the values of preventive medicine. In some of the countries dominated by Health Insurance public health activities have diminished or ceased to exist. Under Health Insurance the average physician is a pawn of the political machine. His morals are the morals of his patients. Independence and dignity are gone. Do you want such a condition in the United States?

If you do, you will have it. If you do not, mere declaiming against it will not stop it. Earnest, organized planning for some better system that can be understood by the taxpayer is in my opinion the only way to combat it successfully.

If the statement in the *New York Times* of November 12, 1933, is true, that the milk distributor makes 200 per cent profit on a 40 quart can of cream, if the milkman can make so much money from distributing the product of the farm that he is prompted to spend his gains upon the salvage of the people's health by furnishing them cheap medicine, is it not perhaps time for the medical profession to take a hand in regulating the milk business so that the farmer may get a little cream for his own children, that some of the profits of this business may be shared with the poor who cannot afford this valuable fluid, and that the milkman by so sharing may improve the public health? Perhaps the milkman may see the justice of socializing his own business at the same time that he is trying to socialize the practice of medicine.

The extravagant hand of government has squandered the taxpayer's money upon reckless excursions into so-called philanthropy. Hospital beds have exceeded one million with sixty-five per cent occupancy, and more hospitals are being constructed and more projected. The vanities and insanities of 1926 to 1929 are operating with empty treasuries and bolstering their delusions of grandeur with paper promises.

All forms of corporate, group or contract practice under lay domination are objectionable because they operate a competitive business, commercialize medicine through the solicitation of patients, and lower the quality of medical care by employment of physicians of inferior ability and by operating in restraint of opportunity against other physicians of the community.

Groups composed of physicians only in the sense of partnerships may have all the virtues of the highest type of medical effort. No one can object to them on moral grounds, but as an aggregation of specialists, as they usually are, they can hardly be claimed to lower the costs of medical care to the patient, and when these groups become too large, bigness is a liability in the sense that younger men in the lower grades lose their individuality and in slack times are thrown out into private practice to begin again with no patients and a loss of years of opportunity.

It is highly advisable to center medical service in small places where there are only one or two hospitals and where all the reputable physicians of the community are permitted the use of the hospital facilities, provided that the hospital does not enter the practice of medicine as an institution, but is merely a place for housing the facilities for the practical use of physicians.

The open hospital offers a solution of many problems of caring for many people whose incomes are too low to provide them with adequate care

at home, permitting their own physicians to employ hospital facilities when they are needed without loss of the personal relationship of physician to patient.

Every young physician should have a hospital connection to supplement his personal efforts by supplying him with the facilities which may be too costly for private ownership, laboratory service and bed service so regulated that the hospital becomes an adjunct to his practice and not a vanishing pool into which his patients disappear forever.

Last year we tried out the Buffalo City Hospital credit blank on two-hundred pre-natal and adenoid and tonsil cases, and found twenty of these cases, or ten per cent, financially able to pay a private physician or to pay their way in a non-governmental hospital. Stimulated by this result, the Bronx County Medical Society decided to start an investigation of abuses of hospital service by people who could afford to employ the services of private physicians. The Society asked and secured the consent of the Hospital Commissioners, and made a survey of 1000 cases of all types just as they applied for admission to the Morrisania City Hospital, to discover the percentage that should be denied the support of the taxpayer. I quote from the report:

#### REPORT OF THE COMMITTEE ON INVESTIGATION OF A CITY HOSPITAL

The Bronx County Medical Society has been actively interested in the public health for twenty years and the membership has become increasingly vocal in expressing disapproval of the abuses of free hospital service.

While sympathetically supporting all volunteer organizations which labor for the relief and rehabilitation of the poor, the society has consistently deplored paternalistic activities which exploit physicians.

The society objects to loading upon the taxpayer unnecessary burdens of hospital operation, while non-governmental hospitals carry many empty beds, and objects to loading upon the taxpayer the expense of caring for many people who are able to pay for medical service in their homes or in private institutions. The society is especially interested in tax problems because the physician is the only double taxpayer concerned in the care of the sick, adding to his normal taxes free care of all patients in city hospitals.

The society has never disapproved and never will disapprove of the free care of the emergent sick whatever their financial status, but after the emergency has passed the society believes that these people, if financially able, should be removed to their homes or to private institutions and returned to the care of their own physicians. The society believes that all non-emergent patients whose incomes or the incomes of their families are competent to provide them with medical care by private practitioners should be denied the hospitality of the city.

While it cannot be denied that active and ambitious physicians desire and compete for positions on the staff of the city hospital, lured by scientific interest and an opportunity for study and advancement of professional prestige, it cannot be too strongly emphasized that all of the service of these hospitals in wards or dispensaries is given without the expectation of any financial reward and is absolutely free.

Last year the committee on economics presented a careful minimum estimate of the value of free services given by physicians on the staff of one city hospital in the Bronx as \$1,347,155 in one year. Inasmuch as the three city hospitals of Bronx County have about the same census, it is reasonable to multiply this figure by three and claim that \$4,041,465 is a

minimum valuation of the free services by physicians in these three institutions.

Abuse of the city's hospitality represents but one phase of a social trend which has been enjoyed for many years by many people who justify themselves by claiming that residency within the city, or employment by the city, entitles them as direct or indirect taxpayers to all kinds of free services, liberal education, transportation at low rates, and special privilege of every sort. They believe that usage has finally created a right, and thus an unbearable incubus has been loaded upon the breaking back of the taxpayer.

A reputable credit service bureau was engaged to study 1,000 unselected patients applying for hospitalization, excluding pre-natal or A and T applicants and emergent accident cases. The study was to apply to ability to pay or ability to obtain credit, after the manner of commercial rating.

The work began on May 9 and ended on June 24, the final report being rendered on July 10. Every patient was asked to answer the Buffalo questionnaire by representatives of the agency at the hospital. The completed blanks were then handed to investigators who tried to get financial data, living conditions, ownership of income producing property or business, or income from employment or family income. A letter concerning each of these patients, including financial statement and credit rating, was attached to each questionnaire and returned to the committee.

The questionnaire used in the investigation was calculated to draw out all possible pertinent information, not only regarding the applicant, but also regarding members of the applicant's family. In addition to the usual questions concerning address, age, married or single, race, birthplace, past and present occupation, church and fraternal affiliations, etc., it sought detailed information about income from business, from property, or from relief agencies, about living conditions, about indebtedness in connection with rents, insurance, mortgages and taxes. In addition it sought information regarding the source of past medical attention, including the name of the last attending physician, and the source of the reference to the Morrisania Hospital.

It must be remembered that no period in our history was less favorable to such a study, when every one was more or less financially embarrassed, when ownership of property was often a liability rather than an asset, when income and credit based upon income were the only things to be considered. The hospital was unusually crowded for the time of year and patients were resentful of questioning, evasive in answering. Some absolutely declined to answer. A few actually left the hospital's admitting office and went elsewhere rather than answer questions.

It must also be understood that the Credit Bureau was interested in nothing but factual statements, applying business methods with which it is constantly familiar in the extension of credit, an entirely different approach from that used by physicians whose judgments are swayed by sentiment and emotion.

The bureau classified the reports in the following manner:

Class 1. No tangible financial responsibility. Present conditions warrant assistance.

Class 2. These are in a position to pay a fee of \$75 or more. This classification includes patients who are under age and whose parents have financial means. It also includes the individual who has a position and those who are property owners.

Class 3. Patients under this classification are in a position to pay \$50 to \$200 with the aid of parents, grandparents and other blood relatives. There are a number of individuals under this classification who have not sufficient financial means of their own; however, their parent or parents are working and are receiving incomes. Others are property owners, while several are the owners of a business, or have tangible assets.

It also includes both single and married brothers and sisters who are living at home or elsewhere, and who are in fairly good circumstances. While it is true they are not *legally* responsible, *morally* the responsibility is theirs.

This information is compiled on facts, and when one takes into consideration the basic principles of credit, the American



people are noted for their ability to pay for obligations, regardless of whether these obligations are luxuries or necessities.

Class 4. Under this classification are included the patients, their relatives and reference given, who cannot be located at the address given.

Class 5. The investigations under this heading are what may be termed as questionable risks. Each case, we believe, requires individual attention. In other words, they are on the border line as to their ability to pay for services rendered.

The committee reviewed all cases in this study, tabulated them in classes, analyzed them as to final diagnosis, time in hospital, result of hospital care, and ability to pay for the kind of service received, operative or medical.

While the Credit Bureau advises extension of credit sufficient to cover all cases in Class II requiring medical, surgical or obstetrical service, the committee's viewpoint differs. The committee recommends free hospital service only to the medical indigent and to all emergent cases regardless of financial responsibility.

The committee defines a medical indigent as one who is compelled to do without the necessities of life in order to pay for medical care, or one who in any circumstances is unable to provide himself or his family with the necessities of life.

The committee also believes that no fixed standard of financial assets can be established as a basis of ability to pay for medical care, instancing the fact that many people who could afford to pay for any illness which required hospitalization of two weeks would be unable to pay for the medical care involved in a long illness such as subacute bacterial endocarditis.

The committee believes that unmarried persons with personal incomes of less than \$1200 or married persons with family incomes of less than \$1800 may be entitled to free service in a City hospital.

Many physicians will think that the committee's position is too liberal here and that they would gladly give extended credit to many people whose incomes fall below these levels. For the purposes of this study the committee deliberately understated its estimates in order that there might be no question about the real value of its statistics.

The committee's final classification is:

Class	Number	Description	Per cent
I	583	Cases unable to pay.....	58.3
II	118	Cases able to pay.....	11.8
III	107	Cases able to pay with help of family income .....	10.7
IV	85	Cases furnishing false addresses	8.5
V	107	Cases possibly capable of paying a physician or of obtaining credit from a physician or of paying minimum rates in a semi-private institution .....	10.7
<hr/>			
1,000			100.0

There is no doubt in the mind of the committee about the honesty of the patients placed in Class I. It is interesting to note that these people seemed to have very little hesitation in answering

questions, some of them volunteering the information that they were willing to pay minimum amounts. On the other hand, there was great difficulty in securing frank response from the 40 per cent who make up the debatable classes.

Most of the patients in Classes III and V would have been cared for without hesitation by private physicians for moderate fees or with deferred credit.

Those in Class IV were largely cheaters who feared a credit investigation. One of them was accidentally found to be the father of a manager of an important business in 42nd Street. Some homeless people, concealing their poverty under false addresses, may of course be included in this class; but it is unlikely that any considerable part of the class is composed of such people.

The Morrisania City Hospital cared for 16,001 patients during the year 1933 who averaged a stay of 11 days in the hospital at a per diem cost to the city of \$4.12.

It is unlikely that there would have been much change in percentages if all of these patients had been classified.

Our first study of pre-natal and A and T cases showed 10 per cent able to pay. The larger group shows 11.8 per cent with similar ability. Based upon a generalized estimate, it seems quite safe to state that at least 1600 or 10 per cent of the patients treated in the Morrisania City Hospital during 1933 were able to pay for medical care, were imposing upon the generosity of the city and were occupying the beds of the poor.

It seems fair to state that at least 1600 patients at \$4.12 per diem stayed in this hospital an average of 11 days and defrauded the taxpayers of the City of New York of the very considerable sum.

There is little doubt that another 10 per cent, or those placed in Class III, could have paid with the help of their blood relatives (parents, children, brothers, sisters) and would have paid private practitioners if there had been no easy entrance to a public institution.

These statistics will undoubtedly be disputed, but the fact that the taxpayers of the City of New York are hospitalizing a very large number of people who are perfectly able to pay for private care is indisputable.

It is obvious that the City Hospital is in active competition with all physicians and in ruinous competition with non-governmental hospitals which through recent additions more than amply provide for the citizens of New York.

If the admission of unworthy applicants can be controlled, over-crowding will be relieved, the poor will have better treatment, non-governmental hospitals will be helped, private practitioners will have more patients, and the City of New York will save a very large sum of money.

It must be conceded that most of the applicants were people of small means, and that there really

were very few patients comparable to the one who made a will distributing an estate of \$100,000 the day before his free operation by Dr. Julius Valentine. Nearly 40 per cent of them, however, were competent to pay private practitioners ordinary fees for the same service they required in the city hospital and therefore should have been denied free service.

The committee recommends that an active credit agency should be set up in every city hospital to determine the financial responsibility of every applicant for treatment, and that there should be a central coordinating agency for the detection of persistent violators of administrative standards established by these agencies.

The committee presents this statistical indictment of a social condition which has evolved from municipal carelessness with a growing conviction that the times are ripe for an awakening of the public conscience to a realization that common honesty demands a fair deal for the hospitals, for the patients who use them, for the taxpayers who pay for them, and finally for the private practitioners of the City of New York.

The majority report of the Committee on the Costs of Medical Care claims that the general practitioner is the most important cog in the medical machine and follows these statements with suggestions of many plans which would merge this individual into groups where inevitably his personality would be lost.

I should like to see the general practitioner's title changed to personal physician or clinician, and I should like to see the schools take immediate steps to produce clinicians and to place the accent upon clinical rather than upon laboratory research. Not forgetting the triumphs of medicine which have destroyed the physician's income from typhoid, malaria, smallpox, diphtheria, and other diseases which are controllable by immunization, let the young physician look toward other fields. Let him study mental diseases whose victims fill forty-two per cent of all hospital beds and many prison cells. Let him study the fields of personality, of endocrinology, of social maladjustments of eugenics, of psychiatry, and of the prevention of mental diseases where he will find much employment profitable to himself and to the heavily burdened taxpayer.

Let it be known that he who has exercised clinical experience long enough to acquire an honest understanding of human nature and its reactions will occupy a place of increasing importance without the assumption of unusual skills in the execution of special techniques. Sound diagnosis is after all the most important field in medicine.

Possessing and cherishing the valuable traditions of medicine without being bound to worn-out formulas, physicians should be sensitive to imminent social changes, and should develop aggressive and progressive plans for the delivery of the

highest quality of medical care to all of our people under medical leadership.

All over the country the county medical societies are holding meetings at which the economic position of the physician, the spread and effectiveness of his service are being discussed. From this discussion we may reasonably hope for the formulation of plans for the "effective demand" for a new battle front led by physicians.

Immediate steps should be taken to put county organizations behind movements which will carry convincing argument to the taxpayer that the medical profession earnestly and honestly stands for tax relief while standing ready to assume its share of the work of caring for the indigent sick.

As a means of defining this idea, I suggest that every county society take under thoughtful consideration the following program:

1. Protection of the interests of the taxpayer, now violated by the abuse of medical charity.
2. Protection of the public health by immunization administered by physicians in their own offices.
3. Protection of the public health by the examination of school children conducted by members of the county medical society.
4. Protection of the public health by the examination of food handlers by members of the county medical society.
5. Protection of the public health by the medical service of baby clinics by the county medical society.
6. Protection of the public health by the medical service of tuberculosis clinics by the county medical society.
7. Protection of the patient from poor medical service in crowded public clinics.
8. Protection of the sick or injured employee from physicians of low character or low ability.
9. Protection of the physician from the diversion to tax-supported hospitals of patients who are able to pay their own bills for medical care.
10. Protection of the physician by co-ordination of all hospitals, municipal, semi-private, or private, by a central information exchange, designed to eliminate unnecessary duplication and waste.
11. Protection of the physicians of the county by close organization of all eligible physicians within the county medical society.
12. Protection of the mutual interests of the members of the county medical society by the employment of an executive secretary.

In support of such a program, and with an earnest desire to stimulate discussion in *this* group of ways and means to advance the frontiers of medical service, my own personal beliefs are here restated.

The physicians of a county or municipality should organize aggressively for formulating plans for *all* health activities. They should be determined that in the future no hospital zone shall be invaded by a new hospital, in order that over hospitalization of the zone shall not occur. This city or county planning should be the concern of the County Medical Society.

Stop such extravagances in hospital construction as have been carried on in New York extending the cost from three or four thousand dollars a bed to twelve or sixteen thousand dollars a bed.



Urge that *all* service to the indigent should be provided by taxation, that well defined indigents should be cared for by local physicians who should be paid minimum fees for this service.

Urge that all dispensary service by physicians should be paid for, thus insuring a superior quality of service.

Advocate the proposition that only those unable to pay should be treated at public clinics or at public hospitals, always excepting those emergency cases of accident or illness occurring to citizens of any class.

Appoint committees in every county society to study this problem, to define the indigent, to protect the taxpayer, and to give every reputable and qualified physician the freedom of opportunity which is his right.

Serve the poor free. Exclude the grafter who is able to pay or who has sources of private help. Give the taxpayer a lighter load.

Stop the practice of medicine by the Health Department, except in the care of county or state wards, or the supervision of the control of communicable disease.

Oppose the operation of health service by lay organizations as necessarily increasing very largely new and costly bureaus of administration.

Advocate the reduction of the number of medical licentiates to a proportion of physician to citizen that will give the average physician a chance to make a living and to maintain a good quality of medical service.

The quality of medical care rises with financial stimulus and falls in mass treatment as under compulsory insurance in England and Germany. At all times the quality of medical care rather than the cost of medical care should be uppermost in the minds of the servants of the sick.

Sickness is intensely individual, and except in acute catastrophic illness or accident can be paid for by all honest citizens above the rank of indigency.

I believe that America needs young physicians who have strong characters and are well-educated.

I believe that character should stand first in the qualifications of the medical student.

I believe that the undergraduate curriculum should contain the teaching of clinical medicine only, together with its public and private application.

I believe that the teaching of the specialties should be post-graduate only.

I believe that hospital internes should be assisted in the completion of their education by payment of a small monthly stipend during the period of their service.

I believe that ambulances should be served by mature persons only and that they should be paid for this service. I should like to see this work undertaken at the end of the internship so that there would be six months of ambulance

training in emergency diagnosis which would give the young physician a lively experience in a great variety of situations and a most valuable immediate preparation for his life work.

I believe that the number of licentiates to practice medicine should be maintained at a ratio never higher than one to one thousand of our citizens.

I believe that all tax-supported hospitals should admit to beds or clinics all emergent cases of accident or illness, regardless of financial status; and in addition should admit only those citizens whose indigency makes them public wards.

I believe that tax-supported hospitals should open all their facilities to all reputable and competent physicians who live in the taxpaying district.

I believe that tax-supported hospitals should include in their budgets minimum payment for the services of all physicians in both wards and clinics.

I believe in the practicability of a county health unit directed by the county medical society and operating without state aid.

I believe in equal opportunity for all physicians forfeitable only by immorality or incompetence.

I believe that the medical profession in America can and will courageously advance to new heights of distinguished service.

300 East Tremont Ave.

## A SNARL OF HATE

I was once the greatest cause of death in the world.

Yet, I am only one eight-thousandth of an inch in length.

My ancestry is obscured in the mists of ancient Chinese history.

Yet, I remained unseen by the eye of man until fifty years ago.

Since 1904 the slaughter I have been able to accomplish in this country has been reduced two-thirds.

I rejoice, however, in the fact that I am still the greatest cause of death between the ages of 15 and 45.

Quack doctors are my allies, because they prescribe medicines to overcome me.

There is no medicine known that can do that.

Rest in bed, fresh air, sunshine, good food and a good doctor are the only combination that can beat me.

Even then I frequently win if I am not attacked promptly.

I hate all tuberculosis associations, because they tell people how I can be overcome and help them do it.

I am the tubercle bacillus and I hate all mankind.—*Bulletin Kentucky State Board of Health*, April, 1933.

# THE JOURNAL

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DEVOTED TO THE INTERESTS OF THE MEDICAL  
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APRIL, 1934

### EDITORIALS

#### MAY DAY

What are we doing here in Indiana to celebrate May Day, to take notice of the fact that all children of our country must be given the opportunity to develop health in mind and body?

Here in Indiana we have an organization that is a little different. We are working under the Indiana plan. The State Health Council has given its approval and the State Medical Association has notified its component county medical societies to request their child health committees to take charge of the celebration by appointing committees of citizens to make all arrangements for the celebration in its county, for May Day is child health day, a day of joy and happiness for all healthy children. On this day appointed for a celebration, we have as our object to emphasize the fact that every child in Indiana shall be given a fair chance for spiritual, moral and physical health.

With this in view, every citizen is called upon to do his part—to see to it that every child is given proper nourishment, to aid him in his moral surroundings, and to help him to have his physical defects corrected and be taught good health habits. The doctors of Indiana have every reason to celebrate May Day this year because of their splendid services in vaccinating the children of the state against diphtheria and smallpox. What could be more fitting this year, for May Day celebrations, than a pageant on diphtheria showing the benefit from toxoid?

According to the plans in Indiana, every day is child health day because the Indiana doctors have accepted the task of teaching child health to parents and this they are always ready to do. Those needing instruction the most and those most neg-

lected are the parents of the young child, the child from one to four years of age. It is at this age that the foundation for future health is laid, that most defects occur and that most bad health habits are formed. It is at this age that protective vaccines should be given. This time of life is spoken of as the runabout age because it is at this time that the child begins to explore the world for himself. He escapes his mother's constant care and protection and yet is not under systematic management of kindergarten or school.

Would it not be well for the May Day committees to continue their interest and to be made permanent committees of child health for the county?

This would mean that every day would really be child health day in that county and child health would be at a high standard.

#### DISTRIBUTION OF PHYSICIANS

Some time ago THE JOURNAL published a very comprehensive article regarding the distribution of physicians in Indiana. While it showed some of our less populous counties much below the average in point of number of doctors therein, it seemed to us that Indiana was very well provided with physicians, but recent developments would indicate that this is not true. We have a letter from a merchant in a small community in the extreme southern part of Indiana which for genuineness has a very strong appeal to us. He says, in part:

"Am asking you in the name of humanity for help. . . . For years there has only been one doctor within a radius of twenty-five miles. Dr. Blank for years has done his best to attend to us, but now he is old and his health will not permit him to ride over the country roads in wintertime. . . . Can you gentlemen put us in touch with some good, young doctor? . . . Of course, he will understand that there are no modern facilities here, but his practice would be all he could attend to and, believe it or not, we pay our doctor bills. Gentlemen, I would hate to tell you how many men, women and children have died, down here, for want of medical attention. Will you, can you, help us!"

In the same mail we have a letter from a druggist in a town of some six hundred population, in Kentucky, presenting a similar request—they want a physician! Among other things, he says, "We need a doctor here now, more than ever. . . . People are begging for the services of a doctor and cannot get one under twenty miles. Every single person who comes in my store and hears the name of a doctor mentioned bemoans the fact that we are without service, here. Any doctor who will come here and acquaint himself with the facts could not resist the lure of such possibilities for a doctor who made any effort to build up a practice."

There are many other places, both in Indiana and in other states, in which there is a crying need for resident physicians. What with modern roads, with a population already thoroughly im-



bued with the knowledge that they must have adequate medical care, it would seem that the younger men would be glad of such opportunities as are now being so generally publicized. Not long ago THE JOURNAL carried an advertisement for a physician; the advertisement had several replies, and one of the correspondents made a personal trip to the territory in question, but the community is still without adequate medical care. During the past four years several Indiana men have given up their practices in the larger cities and gone to the rural communities; in one of our larger cities we personally know of several who have done this and without exception they report great satisfaction with the change. Our observation is that, in addition to those who have changed locations, there are many who wish they might be possessed of the necessary "nerve" to tackle the problem. One young man, in city practice for several years, recently remarked that he wanted to get away from the city but did not know which way to turn. While the location of recent graduates cannot be controlled by resolution or law, it does seem that some effort should be made to persuade at least some of them to enter into what might be termed a more or less rural practice. The lure of city practice, with limited office hours, and all the modern possibilities of rest, relaxation and entertainment, has much to do with the choice of location on the part of the recent graduate; we believe, however, that if the matter is properly placed before them, ere they have graduated, a considerable number will decide to go to the smaller communities, at least for the time being. There is one thing about a country practice that the city man misses entirely, that of a personal responsibility in all his cases; almost invariably he finds himself unable to get immediate consultation; he is left to his own initiative and his native wits often must carry him through. Some time ago we heard a man who had been in city practice for more than thirty years remark, in connection with a very serious case he was attending, that he was calling in a country practitioner for consultation, rather than one of his confreres. His notion was that the country physician must have met the same problem on several occasions and had had to meet it individually. It is one thing to publicize health matters, as the profession has been doing of recent years; it is another thing so to arrange that people may take advantage of our preachments.

#### SIXTY YEARS IN MEDICINE

It is not given to many men actively to engage in the practice of medicine for a period of sixty years; hence when such an accomplishment is completed it is fitting that more than ordinary note should be made of the event. So it was that the senior class of the Department of Medicine, Indiana University, recognized the sixtieth anniversary of

the graduation of William Niles Wishard from the Indiana Medical College. The celebration took the form of a dinner tendered Dr. Wishard and some of the faculty of the medical school, together with a large group of his former assistants and office students. The entire arrangements were in charge of the senior class and they are to be accorded full praise for the manner in which they carried out a splendid program. Dr. Wishard has been the recipient of numerous honorary degrees but we daresay that on no other occasion has his heart been so full, nor has he enjoyed himself so thoroughly, as he did on the evening of February twenty-eighth. The pleasure of the evening was enhanced in no small degree by the presence of his only living classmate, Dr. O. B. Pettijohn, of Noblesville.

Among the guests of the evening were Terry M. Townsend, president of the New York Medical Society, and one of the speakers, Dr. Simon Steelman, of Abilene, Kansas, was present and no doubt enjoyed a probably forgotten episode in his early career until reminded of it by Dr. Wishard. Several Kentucky and Ohio physicians were present to honor their former instructor.

Letters and telegrams from those unable to attend were read by Dr. Wishard's associate, Dr. Homer G. Hamer.

The entertainment program was given by members of the senior class, and consisted of vocal and instrumental music. Earl W. Mericle, president of the class, presided with all the grace and dignity of one who has been out in the field for years, rather than one just about to graduate.

In responding to all the good things that had been said about him and his accomplishments, Dr. Wishard naturally had much to say about the early days in Indiana medicine. The fact that he is the sole author of the basic medical law of 1897 no doubt prompted him to relate his experiences in so-called "medical politics," leading up to the passage of the bill. That this work was well done is evidenced by the fact that the law of 1897, with a few amendments (many of which were made at his suggestion) still stands as one of the best examples of a state medical practice act.

Having known Dr. Wishard for almost thirty-five years, and having been one of his former students, your editor considers it a peculiar and personal privilege to comment on the accomplishments of sixty years in the practice of his profession. During much of this period we have been more or less actively associated with him in the affairs of the Indiana State Medical Association. We have not always been in entire accord with him and occasionally have "gone to the mat" with him regarding various policies; however, we have always found him a fair and open fighter, sticking to what he believed to be the right, yet ready to debate the question.

With our thirty-two years in the profession, sixty years seems like a mighty long time; it is a mighty long time—so long that most of us will never ap-

proach it. True it is that many men have practiced as long or longer, but it falls to the lot of a very few to have such a period so replete with good deeds well done as is the case with Dr. Wishard. We have been attending sessions of the Indiana State Medical Association for many, many years; we have had a bit, now and then, to do with committee work in the organization, during all of which we have had occasion to become very well acquainted with Dr. Wishard and his work, and we know that when the pages of Indiana medical history are written, the name of William Niles Wishard will be an outstanding one, a veritable beacon. We do not agree with a statement recently made that Dr. Wishard is one of the patriarchs of medicine in Indiana; rather do we regard him (and we use the term with the utmost reverence) as the Grand Old Man of Indiana Medicine. That he may be permitted to abide with us for a long time to come, and that we may continue to have the benefit of his counsel and sage advice, is our most devout wish.

#### "INVESTIGATE BEFORE YOU INVEST"

Requests for information have been received at headquarters office from Indiana physicians in regard to the Big Wells Development Company of Texas. We understand that a salesman is calling upon physicians in the state, saying that he has offices in Indianapolis, and making representations that investments in the company will double and triple within a short time. Apparently he has sold some doctors; at least he is carrying a list of physicians with whom he has done business. At the request of the headquarters office, the Indianapolis Better Business Bureau made an investigation of this company and the following letter has been received from the manager of the Bureau:

"According to the present information I have been able to obtain from our contact in Dallas, Texas, it is to the effect that this is a name under which a man named J. C. Reddick operates to sell lots in Big Well Highlands, Dimmit County, Texas. The land is understood to be owned by Lee Holland, who sells these lots to Reddick at a wholesale price, with Mr. Holland making deeds directly to the purchaser, in accordance with instructions from Reddick. Mr. Holland is understood to disclaim any connection with the Big Wells Development Company.

"Our Dallas Better Business Bureau advises us that they have received two complaints from men in Oklahoma. One of these complainants states that back taxes have not been paid according to agreement, and that the title to the property was not clear. The other complainant stated that although Mr. Reddick represented that the taxes would be paid, his investigation discloses that the taxes have not been paid for five years and that he thought someone else also had the title to the same property that he had purchased.

"Our Dallas Bureau advises us that they have written to Mr. Holland several times with reference to these complaints, but at the time of our information, no reply had been received."

#### EDITORIAL NOTES

THE program for the third annual graduate educational meeting of the Indiana State Medical Association appears on page 172.

THE Indiana Division of Public Health, in cooperation with the U. S. Public Health Service, has published a brochure on "The Treatment of Gonorrhea and Syphilis" with particular reference to indigent patients. Copies of the pamphlet will be sent to county medical society secretaries for distribution to members. You will find it distinctly worth your time to read this treatise.

RECENTLY one of Indiana's largest radio broadcasting stations sent out a questionnaire to its Breakfast Club members asking them what they most desired on the early morning programs. First in line were "household hints" and next in order were "health hints" put out and sponsored by someone not having merchandise or something similar to sell. This critical aspect of the radio audience is enlightening and medical societies everywhere could profit by this bit of information.

EVERY physician must have postgraduate study, because: (1) it makes him a better physician; (2) it thereby enables him to obtain a greater degree of success in the management of his cases, increasing his reputation as a physician; and (3) it enables him to cope effectually with the problems of his daily practice. The logical place to obtain postgraduate work is at home where for a nominal fee work may be obtained which would cost from \$75 to \$200 with the added expense of travel if taken elsewhere.

THE layman occasionally has views on medical economics that are worth while. Here is one from the Rotarian: "This summer I went to a doctor to have a medical examination in order to obtain a marriage license. The state law of North Dakota requires this. The doctor put the stethoscope to my lungs, asked if I had any venereal disease—and signed the medical permit, and charged me two dollars. If this is an example of medical individualism—may the Lord preserve us, the doctors won't." To which we say, "Amen."—*Nebraska State Med. Jour., Jan. 1933.*



A PREVIEW of the program for the Indianapolis session in October convinces us that this will be an outstanding event in the history of the Association. By a series of fortuitous circumstances we will have available some of the best speakers in the country. It is not too early to begin planning to take part in this three-day session. Mark your desk calendar right now; and a bit later send in your hotel reservation. We warn you that a record attendance will occur and early reservations get first choice of accommodations, you know.

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DR. T. COOK SMITH, in an article on pediatrics,<sup>1</sup> gives five points to be observed in pediatric practice:

1. Stiffness or rigidity of the neck and abnormal tension of the fontanelle.
2. Look at the throat and ear drums of every child of whom you have taken the responsibility.
3. Careful palpation of the abdomen in all cases, watching particularly for muscle guarding, for masses and for tenderness.
4. Consider the types of breathing.
5. Look at the skin—all of it. Undress every patient.

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ONCE in a while a county medical society secretary learns that he has been too efficient, too obliging, if you please; he finds that in an attempt to furnish information regarding members of his group he has inadvertently placed one of the number "on the spot." Such, it seems, is the lot of one of our most active secretaries, judging from a footnote in a recent bulletin:

"There may not appear any justification for the act but an understanding secretary disclaims any intentional offense for having told an Unknown Doctor's Wife just when the meeting of February 20th had adjourned. It is hoped that no one has been or will be expunged."

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THE Food and Drug Administration recently issued a statement intended to clarify the specific requirements of the Federal Food and Drug Act as they apply to medicinal whisky. The requirements are in regard to the labeling regulations issued by the Federal Alcohol Control Administration. It seems that from now on all medicinal whisky must meet the USP requirements; that is, it must be a "straight" whisky, not less than four years in the wood, and it must contain not less than 47% and not more than 53% of alcohol. If it does not conform to the USP standard, it must be so labeled. Judging from the complaints we hear as to whisky of the blended variety we should say that our indulging folks will soon become USP minded.

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FOR a number of years the U. S. Public Health Service has been publishing, for the information of physicians, health officers, and others, a monthly

abstract journal known as "Venereal Disease Information." This publication contains usually one original article on a subject of general interest in connection with the venereal diseases and numerous abstracts from the current literature pertaining to these diseases. In the preparation of this abstract journal more than 350 of the leading medical journals of the world are reviewed and abstracts made of the articles on this subject. The cost of "Venereal Disease Information" is fifty cents per annum, payable in advance to the Superintendent of Documents, Government Printing Office, Washington, D. C. This nominal charge represents only a very small portion of the total expense of preparation, the journal being a contribution of the Public Health Service in its program with state and local health departments directed against the venereal diseases.

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A NEW medical journal, *The American Journal of Digestive Diseases and Nutrition*, is to be published soon, under the editorship of Dr. Frank Smithies, of Chicago. Dr. Beaumont S. Cornell, of Fort Wayne, will be the supervising editor. The editorial council contains a notable list of men from over America, including Canada, and Dr. L. G. Zerfas, of Indianapolis, is listed in the clinical medicine section. The editorial council is divided into several sections, each group listing men who have achieved enviable recognition in their various specialties. It would seem that the new publication should fill a vacancy in medical journalism, since to our knowledge there is no publication limiting itself to this particular field. It requires no little fortitude to launch a new publication just now, when the medical world finds itself rather hard hit financially, but the publishers are fully aware of that fact. We look forward to the first issue with a great deal of interest.

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A SALESMAN for a surgical supply house walked into the office of a Detroit physician, seeking an order. He was at once advised that the physician patronized only those dealers who advertised in the *Bulletin* of the Detroit Medical Society. A short time later the firm concerned arranged for advertising space in the *Bulletin*. There is a little moral to this tale, and there are two sides to the moral. First, it might be well for members of the Indiana State Medical Association to insist that those with whom they do business carry an advertisement in *THE JOURNAL*; second, it is very important that our members patronize those who advertise with us. A part of the income of *THE JOURNAL* comes from the two dollars per member that is apportioned to it from state dues, but unless we had additional income, we could not publish any sort of a journal worthy of the name. In other words we are dependent upon our advertising friends; hence it should be the purpose of the entire membership to show appreciation of such patronage.

<sup>1</sup> *Kentucky Medical Journal*, March, 1934.

GRADUALLY the medical profession is eliminating the line of demarcation between preventive and curative medicine. In the past the attempt to separate these poorly defined divisions of medical science has worked to the detriment of the profession in general. Nowadays all medical practitioners of whatever branch, be it curative or surgery, must necessarily be practitioners of preventive medicine, for preventive medicine is quite as applicable to the individual as it is to the community. While methods of application vary somewhat the end results sought are practically the same, for the entire profession has one ideal and that is the use of every available means for the prevention of disease or injury. Whether it is the physician or surgeon, at the bedside, in the laboratory, or whether it is the health officer in the field, they are all public servants working for the public good. The continued application of these principles will hasten the day when the physician is restored to his proper place in the minds of the lay public and the phantom bubble of state medicine will burst of its own inflation.

—*Indianapolis Medical Society Bulletin*, March, 1934.

OF RECENT months medical literature has been teeming with reported cases of infections and what-not resulting from the use of various cosmetics. Just recently we saw two cases of an eczematous-like skin affection no doubt the result of using a highly radio-advertised "skin food." The fact that the condition complained of cleared up like magic when the use of the cosmetic was stopped, only to appear again a few days after smearing the concoction on the face, is ample proof. It appears that we have not much to expect in the way of relief as proposed by the Copeland-Tugwell bill, but the publicity attending its course in Congress has helped in that it has made the public mighty conscious of the fact that some sort of regulation is needed. What availeth it if a proprietary manufacturer is restricted as to the labels on his packages, when he may have his favorite radio announcer go the limit in describing the virtues of his output?

ELSEWHERE in this number of *THE JOURNAL* is a letter from I. S. Falk, of the Milbank Memorial Fund. In the March *JOURNAL* appears some correspondence between Mr. Falk and Secretary Hendricks, relative to a questionnaire recently sent to headquarters by Mr. Falk. In publishing the recent Falk letter explanation is given as to why it did not appear with the other correspondence. Mr. Falk seems quite perturbed over the incident, but we see no reason why he should be. Certain it is that the medical profession has had very little reason even to be interested in the Milbank outfit. First, they were "amen corner" members of the crew that made the five-year investigation of the costs of medical care; again, their Mr. Kingsbury was quoted in the press of the country

to the effect that the State of Indiana had abandoned its health department. This statement appeared in quotation marks, hence we had every reason to believe that it was an official report of the article by Kingsbury, but Mr. Falk rather opines that Kingsbury was misquoted in that regard. However that may be, we feel that the Indiana State Medical Association has no retractions to make.

OUR lack of interest in affairs concerning our profession is responsible for so many lay organized and lay managed health societies. Why we allow the laymen to do our work for us is a question hard to answer.

In the state of Indiana alone, at the present time, there are over a hundred and fifty laymen serving as health officers.

It is the duty of every physician to be a leader, not only in health matters but in civic affairs as well, for who, in any community, has more education and training than the medical man? It is our indifference that is responsible for the election of an undertaker to the office of coroner and the appointment of a layman to a Board of Health. In both instances the layman is out of place by lack of training; but we alone are to blame for allowing such a situation to exist.

Perhaps one of our shortcomings is that we expect the laity to know instinctively how important we are and to defer to us in all matters, especially medical. Should they recognize and call upon us concerning health organizations and we show a lack of interest and fail to respond, it is then that the laity take matters into their own hands. Again we are derelict in our duty.

Lest we get an exaggerated idea of our own importance it must be remembered that a great many people do not know the difference between an "honest to God" doctor and a charlatan.

The upshot of the whole matter is that we, as medical men, have been too lax and lazy in taking hold of affairs that are strictly our concern. We have not measured up to the kind of citizenship to which our education and training have justly entitled us.

—*Indianapolis Medical Society Bulletin*, March, 1934.

WITH spring altogether here, a young medical senior's fancy far from lightly turns to state medical board examinations. Indeed, so heavily has the very thought of these examinations rested on some that we are informed attempts have been made by a few of the most inquisitive or perhaps most worried youngsters to get a line on just what questions they are likely to have to tackle. Recently a letter has been received from Chicago by William R. Davidson, secretary of the State Board of Medical Registration and Examination, asking if "there is a good book of questions you could suggest for studying for the examinations." One member of the board, we understand, actually was



approached by two prospective examination-takers from outside of the state who wanted to know "if the board member had the examination questions prepared yet and if they could have a copy?" Of course, there is no book of questions that might be used in studying for examinations, and also, of course, no questions will be available until the fateful examination hour arrives. These inquiries from out-state, however, bring up the question as to whether in some states examination questions may be obtained by seeing the proper persons. In Indiana such a procedure is absolutely out of the question. One of the things to which the Indiana profession can point with pride is the fine tradition that always has characterized the work of the State Board of Medical Registration and Examination. Rumors and scandals have arisen in regard to boards of some other states, but during the Missouri diploma mill scandal, and the board scandals of other states, there never has been even a scintilla of doubt as to the character and honesty of the Indiana Board.

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EARL WHEDON, editor of the Wyoming Section of *Colorado Medicine*, is noted for his somewhat caustic comments on current matters. In the March issue, he pays his "respects" to modern teaching methods as follows:

*"Reading the Alphabet.* It seems to be the latest thing to teach a child to read without teaching him the alphabet as you and I were taught when we were children. When a seven or eight-year-old child who has attended one or two years of school comes to the oculist's office to have his eyes refracted and does not know the names of the letters of the alphabet it certainly does not help the child to a careful examination.

"According to this form of modern teaching, when the letter B is seen we suppose the child should get down on all fours and bellow like a bull. When D is pointed to, the child should bark like a dog. When C is next seen the whole office force should put on a tom cat fight and when L is reached we expect a series of bleats imitating Mary's little lamb.

"It ought to be the pride of every mother to bring a six-year-old child to the oculist knowing the alphabet, even before this child has gone to school. Your mother and mine did it, and if the school teachers don't teach the letters the mothers ought to. The youngster certainly acts the part of a dumb animal when he doesn't know the alphabet, and yet has gone to school for two or three years.

"A recent examination of children of persons receiving federal relief developed the fact that only about one child in three could tell how old he was or in what month his birthday occurred. Perhaps there are some things the mothers and fathers could teach their children before they start to school!"

Being somewhat old-fashioned, we are rather inclined to agree with Editor Whedon.

ATTENTION of members of the Woman's Auxiliary is called to the fact that the American Medical Association has published a booklet entitled, "Principles of Medical Ethics," in which are explained the traditions which have governed our profession since time immemorial, and our conduct among ourselves, toward our patients, and toward the laity at large. The question is raised whether it might or might not be a smart move, also a wise one, to make the above topic the subject of instructive study and discussion at one of the future meetings of the Auxiliary. Our wives are a part of ourselves, and hence they are a part of the profession. The thinking doctor, the one who esteems the good will and friendly wishes of his fellowmen, whether they be physicians or not, attends in a subtle yet effective way to the education of his wife in her attitude toward professional problems and difficulties in all of her social contacts, within and without the profession. Hers is indeed a difficult role to play. Life's richest blessings should come to those women who have the necessary courage to marry physicians. Both wife and mother, housekeeper and social secretary, high priestess and confidante, she makes or breaks her husband professionally, depending upon whether or not she skillfully and tactfully can steer the bridge-table conversation away from the treacherous and questionable subjects of medical affairs toward the safer problems of more general interest. Too often the back-yard-fence conference of yesteryear has given way to the gossiping telephone. Craftily maneuvered by her friends into giddy-headed confidences, flattered at being deferred to as a supposed fountainhead of medical knowledge, often her disclosures over the tea-table would make even friend husband stand aghast. Especially is this true when competing and contemporary physicians' names are mentioned. While ballyhoo and press-agenting may have their respective places in the kaleidoscopic life of the aspiring politician, the ambitious pugilist, or the temperamental movie star, they become malodorous when used by the intimate associates of the conscientious physician. How absurd, how ungraceful, how vulgar it is, and what narrowness of perspective it discloses, for one to be able to discuss comparatively, in a mixed crowd, nothing but physicians and their affairs! How much more sane, how much more elevating and soul-satisfying, how much more charming, to guide the discourse toward good poetry, recent literature, current events, art, music, or even politics! Sir James Barrie once wrote, "Charm is a sort of a bloom on a woman; if she has it, she doesn't need much of anything else; if she doesn't have it, it doesn't matter much what else she has." Among all other, so-necessary virtues for a doctor's helpmate, let us intercede with the Great Giver to give our wives charm.

# THIRD ANNUAL GRADUATE EDUCATIONAL MEETING INDIANA STATE MEDICAL ASSOCIATION

JOINT MEETING WITH THE FIRST DISTRICT MEDICAL SOCIETY

THURSDAY, APRIL 26, 1934  
ELKS HOME, EVANSVILLE, INDIANA

## Morning

- 8:45 a. m.  
Opening remarks by C. J. Clark, M. D., Indianapolis, chairman, Committee on Postgraduate Study.  
Introduction of E. E. Padgett, M. D., Indianapolis, president, Indiana State Medical Association.  
Introduction of Pierce MacKenzie, M. D., chairman, local arrangements committee.  
Introduction of I. C. Barclay, M. D., Evansville, president, First District Medical Society.
- 9:00 to 9:15 a. m.  
"Value of Postgraduate Study," W. D. Gatch, M. D., dean Indiana University School of Medicine, Indianapolis.
- 9:15 to 9:35 a. m.  
"Mechanism of Normal Labor," F. R. Clapp, M. D., South Bend.
- 9:35 to 9:55 a. m.  
"Obstetrical Mortality in General Practice," Harry P. Ross, M. D., Richmond.
- 9:55 to 10:15 a. m.  
"Pediatrics," E. R. Carlo, M. D., Fort Wayne.
- 10:15 to 10:30 a. m.  
Questions.
- 10:30 to 11 a. m.  
"Orthopedics for the General Practitioner," Carl E. Badgley, M. D., Ann Arbor, Michigan.
- 11 to 11:20 a. m.  
"Ear Pain and Its Causes," Albert F. Clements, M. D., Evansville.
- 11:20 to 11:40 a. m.  
"The Management of the Prostatic," Alvin E. Newman, M. D., Evansville.
- 11:40 to 12 m.  
Questions.
- 12:00 noon.  
Lunch, Business meeting and election of officers, First District Medical Society.



DR. R. WESLEY SCOTT

## STATE COMMITTEE

C. J. Clark, M.D., Indianapolis, chairman  
B. G. Keeney, M.D., Shelbyville  
Keith T. Meyer, M.D., Evansville  
Robert Moore, M.D., Indianapolis  
W. L. Portteus, M.D., Franklin  
Walter H. Baker, M.D., South Bend  
M. J. Barry, M.D., Indianapolis  
W. D. Gatch, M.D., Indianapolis

## LOCAL COMMITTEE

Pierce MacKenzie, M.D., chairman  
Charles C. Wilson, M.D.  
Harold D. Lynch, M.D.



DR. KARL MENNINGER

## Afternoon

- 1:30 to 1:50 p. m.  
"The Anatomy of the Endocrines," Burton D. Myers, M. D., Bloomington.
- 1:50 to 2:10 p. m.  
"Some Remarks on the Physiology of the Endocrine," Dr. W. J. Moenkhaus, Bloomington.
- 2:10 to 2:30 p. m.  
"The Interrelationship of the Endocrine Glands," R. L. Sensenich, M. D., South Bend.
- 2:30 to 2:45 p. m.  
Questions.
- 2:45 to 3:45 p. m.  
"Psychoanalysis and Neuro-Psychiatry," Karl A. Menninger, M.D., Topeka, Kans.
- 3:45 to 4:05 p. m.  
"New Developments in Diagnosis of Blood Disturbances," Leon G. Zervas, M. D., Indianapolis.
- 4:05 to 4:25 p. m.  
"Value of X-ray to the General Practitioner," Ralph Lochry, M. D., Indianapolis.
- 4:25 to 4:45 p. m.  
"Methods of Diagnosing and Handling Acute Surgical Problems," Cleon A. Nafe, M. D., Indianapolis.
- 4:45 to 5:05 p. m.  
"Office Surgery," Eli S. Jones, M. D., Hammond.
- 5:05 to 5:30 p. m.  
Questions.
- Evening**
- 6:15 p. m.  
Dinner.  
"Some Observations on Heart Disease," R. Wesley Scott, M. D., Cleveland, Ohio.

Registration fee \$2.00. This includes the dinner charge.

Arrangements for the Indiana State Postgraduate Course and the meeting of the First District Medical Society at Evansville, April twenty-sixth, include facilities for the serving of meals at the Elks Home. Lunch at noon will be provided for those desiring to eat there and the conveniences of the club will be available to the physicians.

Hotels recommended and their rates (all rooms include bath) are:

	Single	Double
McCurdy Hotel	\$2.50-\$5.00	\$3.50-\$7.00
Sonntag Hotel	1.75- 2.50	2.50- 4.00
Vendome Hotel	1.75- 3.50	3.00- 4.50

All members of the Indiana State Medical Association and other State Associations are invited to attend this meeting.



## THE PRESIDENT'S PAGE

The standards of the practice of medicine in this country have risen steadily and not too gradually through the past several years. This much-to-be-desired condition may be said in general to be due to two distinct and efficient agencies. They are, first, the members of the medical profession who have always striven for higher standards in medical training and practice, and second, the public, which is now educated in health matters to such an extent that it simply, and quite properly, demands that medicine both in education and in practice keep pace with other improvements that have taken place and are taking place in our civilization.

That the youth of our country are responding to this recommendation of the profession on one hand and this challenge from the public on the other is amply demonstrated.

### MEDICAL SCHOOL REQUIREMENTS

Regardless of the fact that the entrance requirements in all medical schools have been greatly raised, still students come each year in numbers far beyond the capacity of our schools to accommodate. Usually in our own medical school three to five times as many men apply as can be accommodated, each asking only for a chance to show what he can do in the field of medicine. So great has this number become that the selection of men for entrance and medical training becomes almost entirely a matter of grades. We are thus admitting only the men who show greatest intelligence insofar as it is possible to determine. Everyone connected with the preparation of these students appreciates the grade of men who have been coming from our medical schools in the past few years. They are simply the best we can get, and they are undoubtedly, after the courses in the present medical school have been completed, not only the choicest men, but the best trained men that are graduated from any of the many departments of our great universities. Be it definitely understood that regardless of what the schools put into these men, there is no doubt as to what it requires of them. Add to this one or more years spent in any of our standard hospitals and you have the finished product that is now being offered to the public in the person of the modernly trained physician—a man of super-intelligence, and a man whose intelligence has been super-trained in this, the most difficult walk of life.

He is now ready to meet the actualities of life in a serious profession and in a serious way. The public is willing to accept him at his own appraisal for, say what you may for men in other walks of life, the physician is always accepted as upright and trustworthy until he proves himself otherwise. Furthermore, the state by process of licensure says to the public that here is a man prepared to take care of your health in any way that you may need

help. The physician in this country always has had and, we hope, always will have, the privilege of locating and practicing in the community of his choice. What he makes of his life from that point is a matter that depends wholly upon himself. His duty it is to place himself right with, first, the physicians with whom he must come in constant contact, and second, with the public whom he expects to serve.

The first part of this duty is very simple, although not always carried out as it should be. It consists simply of joining the county medical society, and then living up to the requirements of that organization. The second part requires more studied effort, but it is of equal importance. Remember that your duty covers everything pertaining to the health of your public, namely, education, prevention and cure. Your public should become health-minded, and largely through your own efforts. You never cease to be an educator.

All preventive medicine can only, and should come first of all from the local physician. Cure is a proposition with which you are well prepared to cope. Our methods of treatment and our cures are legion. You will never neglect this phase. Much more likely are you to forget or neglect the just as important phases of education and prevention. In these matters you must be able to put the best possible construction upon the meaning of the word cooperation, that legitimate offspring of organization. America has developed into a country of organization and as a result the public is watching you for it knows what to expect. In whatever locality you may practice you will find some effort at organization in the direction of better health. Your county nurses or your public health nurses, social service workers, parent-teacher associations, and many civic clubs devote all or part of their time and effort to the promotion of better health.

It is your job to find your proper place in relation to these agencies and to familiarize yourself with the work they are doing, as well as the grade of their work. The state intends for you to be the leader in health problems in your community, but it does not expect you to ignore other agencies.

If you will early line up with these various agencies in health, a good beginning will have been made.

Cooperation is the key word to success, but your training and standing entitle you to cooperate from the top, and not from the bottom. Remember always and do not hesitate to assert that you, the members of the medical profession, are the only class in any community that has a *license* to practice medicine.

*E. E. Padgett.*

# An Insurance Man's View on Group Hospitalization

By Harold R. Gordon

Executive Secretary Health and Accident Underwriters Conference

Medical and hospital insurance is a recent development embodying the purchase of medical and hospital care by means of a plan of insurance. Individuals or groups pay to some organization a sufficient amount of money by fixed periodic payments so that that organization can provide medical and hospital care to those individuals who have contributed and who require that service. Benefits are payable in service.

Personal accident and health insurance as distinguished from medical and hospital insurance is the purchase by fixed periodic payments of indemnity for loss of wages occasioned by either accidental injury or sickness. There may be included in these policies provisions for the payment of a fixed sum for accidental death and certain dismemberments, and additional reimbursement for medical and hospital expense. Benefits are payable in money.

The fundamental difference in these two kinds of insurance is the medium of indemnification—the first paying benefits “in kind” and the latter indemnifying in cash. Both utilize the basic principle of insurance, namely, that a provision is made by a group of persons, each singly in danger of some loss, the incidence of which cannot be foreseen, that when such loss shall occur to any of them it shall be distributed over the whole group.

Up to the present time, insurance companies have not included medical and hospital service benefits in their policies nor have they issued these service contracts separately. One of the reasons is the “local” nature of the “service” provided by medical and hospital insurance.

At the present time, workmen's compensation insurance involves the maintenance of a certain amount of medical and hospital service to injured workmen by the insurance carriers. This medical treatment has been the cause of some dissatisfaction because of the necessity on the part of the

insurance company to give effective medical treatment and at the same time keep the cost of such medical treatment within the limits of the rates for such insurance. The same difficulty presents itself to personal accident and health insurance companies in handling medical and hospital service—arrangements would have to be completed through third parties to render such service, and this presents many complications.

In the files of nearly all personal accident and health insurance companies are many tentative plans or schemes embracing some form of medical or hospital insurance. During the past few years, partly as a result of the depression, many promoters and other ambitious persons have

conceived numerous plans for placing the medical and hospital care of the American public on an insurance basis. *Only two insurance companies have attempted to issue these contracts and neither has been successful.* The chief reason why insurance executives up to the present time have not undertaken these new insurance plans has been either because the plan itself is too theoretical and impractical or else because the reputation of the sponsor or promoter would not justify the insurance company lending its name to such contract.

So numerous have been many of these medical and hospital service associations in California, some of which have been entirely money-making schemes for their promoters, rendering little if any service, that the insurance interests in that state endeavored to enact legislation bringing this type of association under state insurance supervision. Recently, the Attorney General of California ruled that these medical and hospital service contracts are contracts of insurance and therefore associations offering such contracts should be licensed and supervised by the insurance department. Hospitals, physicians, or insurance companies who be-



HAROLD R. GORDON

Besieged on all sides by proposals concerning group hospitalization last spring, the Executive Committee of the Indiana State Medical Association consulted with the officials of the large insurance companies of the country concerning the practicability and workability of these various schemes. At that time the committee had the pleasure of making the acquaintance of Harold R. Gordon, executive secretary of the Health and Accident Underwriters Conference, an organization of the leading carriers in that particular insurance field. As the question of group medical and group hospital insurance is still very much discussed, the members of the Executive Committee asked Mr. Gordon, who in their minds probably is better informed than any other person from a practical standpoint on this type of insurance, to write an article on the subject from the underwriter's viewpoint. The viewpoint is worthwhile, and immediately brings to mind of physicians the following question: How, if group insurance is not satisfactory under the management of well-established insurance carriers, can it at the present time be satisfactory under the management of hospitals or groups of physicians?



come parties to "promotional" types of medical and hospital insurance are simply building up for themselves public ill-will.

It is natural to expect in the development of any new form of insurance that many impracticable and actuarially unsound schemes will be proposed. Individuals with ingenuity but with a lack of fundamental knowledge of insurance have proposed scores of plans which have been utterly devoid of sound principles of insurance underwriting and without any conception of adequate costs. Some few of these plans have been proposed by well-meaning, intelligent and entirely reputable sponsors who have conceived an "idea" but who lack the ability to comprehend a practical application of their idea to a form of insurance.

No reputable insurance company has or will consider any form of medical or hospital insurance where the sponsorship is not provided by reputable persons or groups, and unless the coverage and rates are on a workable, practical basis and capable of being administered by the company with their other insurance business. Many plans presented to insurance companies have considered the insurance company only as a carrier or administrator and fail to give the insurance company the control of costs, which is necessary to provide an efficient administration of any insurance plan. It is self-evident that an insurance carrier cannot assume a risk without being able to control costs and this is true whether the insurance carrier is a stock company, a mutual company, a fraternal or simply an association of physicians or hospitals organized to carry out a medical or hospital service plan.

One of the definite trends of all forms of social insurance is the steady increase in recorded losses which takes place with the development of such insurance. Insured risks become more "claim conscious" in direct proportion to the length of time they have been insured. Under national health insurance in Great Britain, sickness losses have doubled in twenty years, and in Germany over a longer period similar losses have nearly trebled. The "morbidity" rate of an insured group is always much higher than the morbidity rate of those without insurance.

Medical and hospital care by means of an insurance plan sponsored by civic or social welfare groups may appear to be the solution of some of our economic ills but the thoughtful and far-seeing physician will do well to consider the close relationship between this type of social service and state medicine. It is only a step from these group plans of medical care and hospitalization to 25 cents-per-call medical care furnished by state physicians. I do not believe the American people want their medical care and hospitalization administered by politicians with a resultant lowering of now existing high standards for such service.

## PUBLIC HEALTH NURSING: THE RIGHT AND THE WRONG WAY TO DO IT

That there is a right way and a wrong way to put across a public health project has been abundantly demonstrated in recent years in Indiana. We all know that health work in this state has frequently been handled in such a way as to antagonize the medical profession, and for that reason has been unable to reach its goal. It is not long since every issue of *THE JOURNAL* carried some criticism or complaint concerning the activities of the State Board of Health, particularly the Division of Infant and Maternal Welfare; the public health nurses; the University School of Medicine; or the University hospitals. Under the new set-up nearly all of these causes for complaint have been removed and there now exists a state of harmony which would have been considered Utopian only a very few months ago. As an example of health work which avoids these various objections and still discharges the obligation of the public health nurses to the community, we should like to present for the consideration of the profession the following sets of standing orders for public health nurses.

Approximately three hundred Civil Works Service Administration nurses have recently been engaged, in addition to the nurses who were already in the field. Such a large number of additions might be expected to bring a great many complaints, but such has not been the case. We are strongly inclined to believe that the reason for the few complaints is to be found in the careful manner in which the nurses were instructed as to their duties and obligations. First of these letters is that from Mr. Tom Hendricks, under date of December 11, 1933, addressed to all county medical society secretaries, officers, and councilors of the Indiana State Medical Association.

December 11, 1933.

To: County Society Secretaries, Officers and Councilors of the Indiana State Medical Association.

From: Headquarters Office, Indiana State Medical Association, 1021 Hume-Mansur Building, Indianapolis, Indiana.

Subject: *Standing Orders for Nurses Who Are Being Given Work Under the Civil Works Administration Program.*

The Civil Works Administration has as one of its objects the re-employment of a number of nurses who have been out of work during the depression. Under this program these nurses are being employed throughout the state in rural and city public health services.

In order that the work of these nurses shall be held strictly to ethical standards it is suggested that rules and regulations concerning their activities be drawn up by your local county medical society for the assistance of the supervising public health nurse in each locality. This must be done as soon as possible as these nurses are being put back to work throughout the state every day.

A set of suggested rules and regulations adopted by the medical advisory committee for public health nursing projects appointed by the Vigo County Medical Society is enclosed as a guide for any rules and regulations you may desire to draw up for your locality. None of this nursing service is to be undertaken without the consent and knowledge of each local county medical society, we have been assured by the state authorities.

If any questions arise in regard to this we would suggest that you get in touch with Miss Eva F. MacDougall, director

of the Bureau of Public Health Nursing, State Division of Public Health, 6 State House Annex, Indianapolis.

THOMAS A. HENDRICKS,  
*Executive Secretary.*

The next document is the standing order which was put out by the Vigo County Medical Society governing the activities of all county nurses.

#### COMMITTEE REPORT OF VIGO COUNTY MEDICAL SOCIETY ON ACTIVITIES OF COUNTY NURSES

G. C. Congleton, President      C. A. Curry, Vice-President  
A. M. Mitchell, Secretary-Treasurer

1. Indigent cases should be referred through regular channels—township trustee, etc.
2. Families not on indigent list will have to get doctor whatever way they can.
3. Use slip like that in use in the city schools to notify parents.
4. Suspicious cases must have certificate from doctor before returning to school.
5. Contagious disease chart (copy enclosed) approved except for scabies and pediculosis. Under remarks, no treatment allowed. See physician for these. (Additional copies of this chart may be obtained from the State Division of Public Health, Indianapolis.)
6. Persons excluded should be as outlined:

#### CONDITIONS USUALLY REQUIRING EXCLUSION OF CHILDREN

Temperature of 99.6 or over.  
Pink eye or other discharging eye condition.  
Any symptoms of contagious disease.  
Any rash.  
Any inflamed throat.  
Any cough.  
Coryza.  
Nausea and vomiting.  
Membrane on tonsils or throat.  
Severe case of scabies and a mild case of scabies where hands and lower arms are affected, unless they are covered by bandages or gloves, and satisfactory treatment is given.  
Pediculosis, where vermin are present.  
Ringworm, when severe and not satisfactorily treated.  
Impetigo, when severe and not under satisfactory treatment.

7. Nurse's inspection should be as outlined, and any other condition warranting care should be sent to physician.

#### Items for nurse's inspection:

1. Weighing and measuring by nurse or teacher periodically to determine growth.
2. Vision testing.
3. Hearing testing.
4. Inspection of eyes and ears for redness and discharge.
5. Mouth breathing.
6. Noticeable enlargement of neck glands, thyroid.
7. Color of skin—cleanliness.
8. Skin rash, ulcers or sores, and body vermin.
9. History:
  - Diseases and illnesses—immunization.
  - Health habits (sleep, diet, cleanliness).
  - Teacher's report of conduct and grades.
  - Home conditions.
8. Nurse's bag should contain articles as outlined.
  - 1½ oz. bottles, two or more, for green soap and alcohol;
  - mouth thermometer, pair scissors, box wooden tongue blades, toothpicks, paper towels, soap box and soap if liquid soap is not used, eye chart, both letter chart and symbol chart; measuring tape or yardstick, green soap, alcohol, triangular bandage, one or more; cotton, jar for cotton, newspapers, vials of 2½ grams tannic acid powder.

The bag shall contain no other drugs than those which the nurse has been authorized to use by the local medical society or the chapter medical advisory committee and which are covered by standing orders.

9. Nurse's program as outlined. Talks to groups to be made by county medical society.

#### NURSE'S PROGRAM

1. Inspection of school children.
2. Invite parents to inspections, for conferences at school.
3. Teach teachers to look for symptoms of communicable diseases (rapid classroom inspection).
4. Take care of necessary first aid.
5. Assist in control of communicable diseases.
6. Help with immunization.
7. Home visits as necessary to urge correction of serious physical defects.
8. Health talks should be made by representative of county medical society. Nurse to plan and arrange for same with secretary of county medical society, as outlined by state board of health.
10. Standing orders as outlined.

#### TREATMENTS AND EMERGENCIES

Treatments are given by the nurse only when she is working under a medical director or when a medical advisory committee has agreed upon standing orders. In some schools the principal appoints an assistant or teachers to be responsible in the absence of the nurse for the care of emergencies.

#### GENERAL POLICIES IN HANDLING EMERGENCIES

In case of accidents or injuries occurring in the school or on the school grounds, the nurse or someone in the school gives first aid. If condition is serious, the family is notified and child referred to a physician.

For injuries or accidents occurring in the home or out of school, responsibility rests primarily with the family or the family physician.

The nurse should not disturb a dressing put on by a physician except at his request. She should not assume responsibility for the care of infections, but should impress on pupils, parents and teachers the importance of a physician's care for such cases.

The child who has been ill or hurt at school should not be permitted to go home alone.

In case of fracture immobilize part in position found and call doctor after consulting parents.

#### EMERGENCIES

*Discharging Ears*—Cleanse only outside.

*Pediculosis*—Exclude until a certificate from doctor is received saying condition is cured. Follow up with home visit if necessary to get condition corrected.

*Favus Ringworm, Impetigo and Scabies*—Exclude until cured and has doctor's certificate. If case is neglected make a home visit to secure correction.

*Cuts or Scratches*—Bandage with sterile dressing.

*Poison Ivy*—See doctor.

*Burns*—Two and one-half grams tannic acid to quart of boiled water. Dip gauze in solution, apply to burn and call doctor, only in emergencies.

*Boils*—Apply sterile dressing.

*Dog Bites*—Let bleed freely. Apply sterile dressing. Report name and address of person bitten. Report name and address of dog's owner to Board of Health. Use influence to have dog secured *alive* for examination. Urge medical supervision.

*Toothache*—Send note home recommending family dentist.

*Splinters*—Clean with green soap and alcohol, bandage and urge medical care.

*Foreign Body in Eye*—A physician should be consulted.

*Infections*—Recommend physician.

*Nose Bleed*—Have child sit in chair with head up and slightly back. Apply cold compress to back of neck. Do not wipe or blow nose. Have child lie down before returning to class or going home. Apply cold compress to nose.



The last document is of particular interest and is the standing order for Civil Works Service Administration nursing project in Gary, Indiana. This form, after having gained the consent of Dr. I. A. Miltimore of the Medical Advisory Council, and of Dr. E. M. Shanklin, secretary of the Lake County Medical Society, is being presented herein. This standing order will bear the closest examination. It is not unlikely that some of it would need to be changed for use in another community, but certainly the principle is right. Each county will do well to get up its own set of regulations governing the activities of the public health nurse. When this is done we may confidently expect the public health nurses to be of greater benefit to their communities, to cease to be thorns in the sides of the practicing physicians, and best to protect their positions, inasmuch as nurses more frequently lose their positions because of real or supposed infraction of these general principles.

#### PROGRAM AND STANDING ORDERS FOR CWSA NURSING PROJECT IN GARY, INDIANA

Adopted by Medical Advisory Committee, January 6, 1934

##### PROGRAM

#### I. Bedside Nursing—

- a. General.
  - Medical.
  - Surgical (dressings, etc.).
- b. Maternity.
  - Post partum care.
  - Care to new born.
- c. Communicable.
  - (Special technique necessary—has been approved by health officer.)

#### II. Instructive or Educational Visits—

- a. Prenatal.
- b. Post partum and post natal follow-up.
- c. Others as requested by doctor or social worker.

#### III. School—

- a. Inspection of school children.
- b. Instruct teachers to look for symptoms of communicable disease.
- c. Necessary first aid.
- d. Assist in control of communicable disease. Exclusion and readmission of children. Suspect contagion to have certificate of doctor or health department before returning to school; by assisting with immunization.
- e. Home visits as necessary to urge correction of serious physical defects, to interpret the principles of healthful living, and the prevention and control of illness, including principles and methods of immunization.

##### STANDING ORDERS—GENERAL

To be used when previous orders have not been left by physician or when patient has not had physician when nurse makes first visit. In each case use only until nurse can communicate with physician.

*For All New Patients*—General or partial care as indicated. Instructions in hygiene of the sick room, with special emphasis on good ventilation, cleanliness, and diet suited to the patient's condition and needs. Isolate suspicious cases of communicable disease.

*For Adult Patient With Fever* (Undiagnosed)—Rest in bed. Separate from children. Liquid diet.

*For Infants and Children With Fever* (Undiagnosed)—Rest in bed. Separate from other children. Diet: Boiled water for 24 hours for infants. Liquids but no milk for children.

*Colds*—Liquid diet. For adults, plenty of hot water to drink. *Infantile Diarrhea and Infantile Convulsions or Threatened*

*Convulsions*—Plain water rectal irrigation, p.r.n. For convulsions, immerse in warm water. No food or milk. Boiled water or barley for 24 hours.

*For Communicable Diseases*—Isolate. See special routine regarding concurrent disinfection. All suspicious cases should be referred to local health authorities at once if medical attendance is refused or cannot immediately be secured. Boric or normal salt solution for eyes and nostrils, p.r.n. Vaseline or cold cream for lips, and nose, p.r.n. Oil rub, p.r.n., for all desquamating cases. Liquid diet.

*For Discharging Ears*—Cleanse the outer ear with moist boric solution swabs. Dry thoroughly, do not irrigate. Emphasize need of prompt medical attention.

*For Dressings*—Minor cuts, bruises, infected fingers, scratches: Paint with mercurochrome or iodine, or soak in sterile salt solution and apply sterile dressing. Advise medical attention when indicated.

*Pneumonia*—Liquid diet. General care as indicated. Emphasize value of fresh air.

*Sore Throat*—Liquid diet, urge fluids. Isolate if possible until physician sees case.

*Ulcers* (Chronic)—Cleanse with lysol or boric solution: Apply hot boric or normal saline dressing and firm bandage.

*Pressure Sores*—Remove pressure: Apply ointment used by family on dressing. Secure order from physician.

*Constipation in Newborn Infants*—Sterile water or normal saline enema.

*Postpartum Hemorrhage*—Raise foot of bed, knead fundus.

NOTE: Nurses are required to obtain diagnosis and orders from family or clinic physician. *No exceptions.* It will facilitate matters if physician would phone orders to office, or leave in writing in patient's home. When unwise to give over phone, nurses to arrange for an office conference.

##### SCHOOL NURSING

School nursing should be done if at all possible under medical supervision. Nurses obliged to work without this supervision should be especially careful to observe ethical relationships at all times, and to develop sense of judgment.

They may be guided in a general way by the following rules:

Conditions usually requiring exclusion of children: Nurses report to teacher and teacher accepts responsibility of exclusion. See law, par. 206, 1913, Sec. 2.

1. Temperature of 99.6 or over:
  - a. In cases of threatened epidemic.
  - b. If accompanied by other symptoms. (Headache, sore throat, nausea, etc.)
  - c. Children applying for readmission after illness.
2. Any inflammatory eye condition.
3. Any rash.
4. Any cough:
  - a. During whooping cough or measles outbreaks.
  - b. Associated with temperature.
5. Coryza—if associated with other signs of disease.
6. Sore or inflamed throat. Culture and exclude all sore throats until report.
7. All discharging ears until note from doctor (culture routinely).
8. Pediculosis—exclude until clean.
9. Other skin disease—exclude until cured.

##### ITEMS FOR NURSE'S INSPECTION

(Select by screening.)

1. Weighing and measuring—by nurse or teacher periodically to determine gain and growth.
2. Vision testing (previous demonstration by physician).
3. Hearing testing (previous demonstration by physician).
4. Inspection of eyes and ears for redness or discharge.
5. Teeth.
6. Nasal passages—mouth breathing.
7. Throat.
8. Cervical glands.
9. Thyroid.
10. Skin and scalp.
11. Speech defect.
12. Posture: History—disease and illnesses—immunization—health habits—teacher's report of conduct and grades—home conditions.

## STANDING ORDERS FOR EMERGENCIES

Treatments are given by the nurse only when she is working under a medical director or when a medical advisory committee has agreed upon standing orders.

In some schools the principal appoints an assistant or teachers to be responsible in the absence of the nurse for the care of emergencies.

## GENERAL POLICIES IN HANDLING EMERGENCIES

In case of accidents or injuries occurring in the school or on the school grounds, the nurse or someone in the school gives first aid. If condition is serious, the family is notified and child referred to a physician. For injuries or accidents occurring in the home or out of school, responsibility rests primarily with the family physician. The nurse should not disturb a dressing put on by a physician except at his request. She should not assume responsibility for the care of infections, but should impress on pupils, parents and teachers, the importance of a physician's care for such cases. The child who has been ill or hurt at school should not be permitted to go home alone.

In case of fracture immobilize part in position found and call doctor after consulting parents.

## EMERGENCIES

*Discharging Ears*—Cleanse only outside. Exclude until note from doctor. Culture.

*Pediculosis*—Exclude until clean of vermin and nits. Nurse may teach family to treat with Derbac soap and comb. Treatments may be given at schools in emergencies.

*Cuts and Scratches*—Bandage with sterile dressing.

*Poison Ivy*—See doctor.

*Boils*—Apply sterile dressing.

*Dog Bites*—Let bleed freely. Apply sterile dressing. Report name and address of person bitten. Report name and address of dog's owner to Board of Health. Use influence to have dog secured *alive* for examination. Urge medical supervision.

*Toothache*—Send note home recommending family dentist.

*Splinters*—Clean with green soap and alcohol, bandage and urge medical care.

*Foreign Body in Eye*—If object cannot be removed by flushing with eye dropper and boric acid solution, or by twist of sterile cotton, refer to physician.

*Infections*—Recommend physician.

*Nose Bleed*—Have child sit in chair with head up and slightly back. Apply cold compress to back of neck. Do not wipe or blow nose. Have child lie down before returning to class or going home. Apply cold compress to nose.

## INSTRUCTIVE VISITS—PRENATALS

1. What prenatal care is and why necessary.
2. Diet: Varied diet. Milk, not less than one pint. Cereals, green vegetables, fruits, meats or substitute (meat limited), fats, sugar and sweet foods, limited; 6 to 8 glasses water.
3. Sleep eight hours.
4. Exercise and rest. Avoid fatigue. Short periods of rest as obtainable. Light house work or daily exercise in open.
5. Bath: No tub bath after seventh month.
6. Clothing: No round garters or tight bands. Brassiere for support only.
7. Care of nipples. Refer to physician.
8. Right angle position and bandage for varicose veins.
9. Constipation: Water, diet, habit training. Teach to prepare prunes and senna according to recipe in handbook.
10. No sexual intercourse after eighth month or as advised by physician in other cases.
11. Supplies and preparation for delivery.
12. Symptoms to report to doctor. (Headache, dizziness, edema, blurred vision, diminished urine, bleeding, etc.)

This is the briefest sort of guide. Refer to manuals and text on desk for additional help.

## FOLLOW-UP

Made about one week after last nursing visit.

Check on condition of eyes, skin, umbilicus, regular hours,

whether baby sleeps alone. Repeat bath demonstration if necessary or supervise while mother gives it.

*Post Partum Examination*—Many Gary physicians examine post partum cases routinely at end of sixth week. If mother has not been told about this by doctor, may be referred back to him on this visit if any bleeding, leukorrhea, temperature, or if fundus may be palpated.

*Health Supervision*—Many Gary physicians supervise babies whom they have delivered up to their first birthday. If this service is not available, nurse may advise according to *Government Bulletin on Infant Care*, including directions for giving C. L. O. and orange juice, but remembering that feeding problems should without exception be carried only under direction of physician.

## SECRETARIES' COLUMN

## 100 PER CENT SOCIETIES

BENTON COUNTY MEDICAL SOCIETY  
FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY  
HANCOCK COUNTY MEDICAL SOCIETY  
LAWRENCE COUNTY MEDICAL SOCIETY  
SWITZERLAND COUNTY MEDICAL SOCIETY

WHEN will your society be one of the one hundred per cent societies?

In the *Journal* of the A. M. A. for March 3, 1934, on pages 696 and 697, is the report and comment of a meeting held in Philadelphia, which every secretary should read and digest. Get all your members to read this article. It shows what doctors think when they get a salaried job. It is a question whether these men could make a living in the general practice of medicine. In order to earn their bread and butter (if you can say "earn") they had to take up the whims of men who have made millions and who now want to make themselves famous. They have not the least idea what the average family thinks of its family physician.

How many secretaries and presidents have studied the suggestions for county medical societies given to them at the Secretaries' Conference in January? It is imperative that you digest all that is contained in those pages. If these suggestions are followed, it means a united medical society. It means the developing in your society of men who will do things. It means the education of the public on health matters. It means harmony among the various county medical societies. It means a better state medical association. It means better programs, scientific and economical. It means that more interest will be shown in legislative problems. It means harmony among the members of your local society. It means harmony in the state association. It means a united front against philanthropists. Let all of us get busy



and carry out these suggestions and accomplish all that we can before the next secretaries' conference. All these things will be the big subjects in another year.

Arrangements have been completed and two talks already have been made over radio station WBOW by one county medical society. I think this could be done by other county medical societies in Indiana. This is propaganda with the sanction of the county medical society. It is legitimate advertising. This is a method of letting the public know that the physicians have something to offer them that is sane and sensible. This same advertising or propaganda can be put out in your local newspapers by reporting your county society programs to the editor, but please have something in the article that will let the public know that you can do something for them, e. g., periodic health examinations. Another thing is to sell your patients on these things in your office. If the various foundations can do it, the doctors can do it, too.

State medicine may or may not come, but it is a topic of great importance. It is in the minds of many people. It is important enough to be made the subject for use by debating teams. On March tenth, over station WLS, a debate was heard between groups from DePauw University and Purdue University on this subject. Who sponsored this half-hour program we do not know, but nevertheless state medicine is being put to the public in every conceivable way. Now it is up to every physician and medical student to put forth his side of the story. Study the question and talk freely.

All this leads to the question, "How much have you re-invested in yourself?" A good inventory of your keeping up-to-date on all phases of medicine will help combat the things that are after you. You can keep away from the "big, bad wolf" in a better and bigger way.

A. M. MITCHELL, *Chairman.*

DIPHTHERIA REPORT FOR FEBRUARY

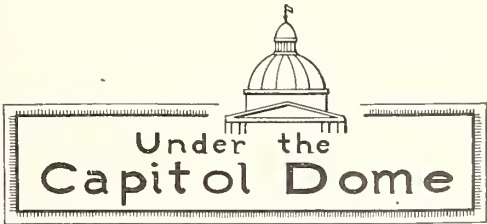
There were ten deaths from diphtheria in the month of February, bringing the total for the year to the number of twenty-three. This is five less than the lowest previous number to this date. The average for the preceding four years is thirty-five. This continues to hold forth the idea that the immunization campaign is already beginning to bear fruit—probably through its publicity. It is also interesting to note that there has been a considerable falling off in the number of cases of diphtheria reported in recent weeks.

We are very sorry to be compelled to continue to call attention to Allen County, which had two

deaths in January, and two again in February. This means that they have had more than one-sixth of the deaths for the entire state. Perry County has an even worse record, in that it has had three deaths although it is a small county. We are somewhat concerned to see the counties in the pocket, namely, Perry, Spencer, Warrick and Vanderburgh, already showing seven deaths.

For the past four years the figures show that the total number of deaths for January and February has been approximately twenty-five per cent of the total number for the whole year. If these figures should continue, we might expect to have somewhat less than one hundred deaths from diphtheria for the year. We are not wishing to commit ourselves on this as a prophecy, but it looks as if such a figure might easily be reached, in view of the fact that we should get the benefit of the immunization campaign next fall. Such a figure would be a very decided reduction in the number of deaths for a given year.

County	February 1934	Total for 1934
Allen .....	2	4
Greene .....	0	1
Harrison .....	0	1
Jackson .....	0	1
Knox .....	1	2
Lake .....	0	1
Lawrence .....	0	1
Marion .....	2	3
Montgomery .....	0	1
Perry .....	2	3
Spencer .....	1	1
Warrick .....	0	1
Vanderburgh .....	2	2
Wayne .....	1	2
Total .....	11	24



NECESSITY FOR DETAILED MEDICAL REPORTS IN COMPENSATION CASES

Good medical reports are one of the most important aids in the efficient and economical administration of the Federal Compensation Law, particularly in respect to the application of this law to the millions of employees engaged on Civil Works projects. A good medical report in the eyes of the commission is one in which all of the questions are answered completely and in such detail as may be required to furnish a clear picture of the medical aspect of a case.

The forms required by the Federal Employees' Compensation Commission are devised to meet administrative problems that of necessity arise in connection with the adjustment of claims from the record in a case. From the viewpoint of the physician who is called upon to fill out these forms, much of the information may appear entirely unnecessary. From the viewpoint of the commission, however, such information is essential, both in the interest of the public, which pays compensation costs, and the injured employees whose right to compensation oftentimes depends in a very large measure on the evidence of the physician from whom he has obtained medical attention. The commission has consistently endeavored to simplify the procedure involved in handling these claims to avoid, as far as possible, the submission of unnecessary reports. Investigation will disclose that the paper work required under the regulations of the commission in connection with these cases is much less than that required in connection with the administration of some state laws.

When one stops to consider that under the Civil Works program several million men were put to work without any physical examination to determine their fitness for the work to which they were to be assigned, that many of these men were suffering from malnutrition, and that among this number were many with pre-existing physical defects of almost every character, the necessity for detailed medical reports where an injury is alleged becomes readily apparent. In many cases an injury will be alleged for conditions which in reality are due to pre-existing physical defects, and efforts will be made to collect compensation for conditions not in any way attributable to employment on Civil Works projects. It is not improbable that malingering will develop in a larger number of cases than might be anticipated under more normal employment conditions. The commission in the administration of this law must, in a large measure, depend upon the reports of attending physicians to determine the compensation liability in such cases.

In view of the importance attached to medical reports in the adjustment of compensation the commission solicits the cooperation of the medical profession to the extent of submitting full and complete reports in all cases. It is realized that this may involve some sacrifice of the time of the attending physicians, but for obvious reasons, some of which are stated above, the reports cannot be dispensed with.

HARRY BASSETT,  
*Commissioner—U. S. Employees'*  
*Compensation Commission.*

The above paragraphs were accompanied by a letter, portions of which follow:

"I am inclosing a short statement which I believe emphasizes the necessity for careful and detailed medical reports in all compensation cases. The procedure in connection with the handling of these cases under the federal law is different than under most of the state laws, as most of these cases are adjusted on the record. It would be a physical impossibility, almost, for the Commission to undertake the personal

investigation of all of these cases. If that were possible, some of the medical reports could be eliminated and the information obtained in that manner could be secured through personal contact with attending physicians. That is out of the question, however, and the best the Commission has been able to do is to confine these reports to those involving absolutely essential information.

"The medical profession generally has shown a willingness to cooperate generously with the Commission in meeting the problems incidental to providing medical attention in compensation cases arising under this work program. This cooperation is greatly appreciated by the Commission. In this connection I trust you will inform the members of your society that there will be some unavoidable delay in the adjustment of accounts for services rendered. This is due to the fact that the task of handling this work developed over night, so to speak, and the Commission has experienced difficulty in setting up the necessary organization to adjust and pay claims for medical and other services. These accounts are being handled as rapidly as possible, and the administrative organization should be functioning efficiently at a very early date. Some 50,000 cases, however, have been reported to the Commission within several months, and you will realize that some time is required to effect the payment of accounts in all of these cases. I trust that the members of your society and other physicians who have participated in this service will be patient, and they may be assured that in all cases adjustment will be effected as rapidly as possible.

"Concerning your inquiry regarding employees of the Public Works Administration, I have to advise that practically all of these employees will be in the service of contractors and will not come within the scope of the Federal Compensation law. They very probably will be subject to the various compensation laws in the states in which the employment is carried on.

"I am glad to have had this opportunity to explain the Commission's side of this problem, and I hope you will assure the members of your society that the Commission does not want to burden them unnecessarily by requiring more than essential reports."

All of the above information was supplied by Mr. Harry Bassett, Commissioner, United States Employees' Compensation Commission.

\* \* \*

#### PERMITS TO PRACTICE

The State Board of Medical Registration and Examination will meet Friday, March thirtieth, in the board's offices in the State House Annex.

\* \* \*

Examinations of candidates for Indiana licenses to practice medicine will be conducted by the State Medical Board beginning June nineteenth. The examination will extend over three days. Under present plans they will be conducted in the Claypool Hotel.

\* \* \*

Temporary permits to practice medicine in Indiana were granted five physicians from other states by the State Board of Medical Registration and Examination. The permits are valid for six months, after which a permanent permit is granted in the discretion of the board. Those to whom temporary permits were granted, the states from which they came, and the location of their new offices, are: Vernon B. Beam, Maryland, located at Plymouth; Richard L. Smith, Ohio, located at French Lick; Martin C. Heck, Kentucky, located at Lafayette; Joseph Z. Estrin, Michigan, located at Kendallville, and Arthur P. Rhamy, Georgia, located at Wabash.



During the past sixty days the board has granted permanent reciprocity permits to four physicians from other states. They are: George S. Row, Kentucky, located at Osgood; Edward D. Gibson, Kentucky, located at Hardinsburg; Herman T. Combs, Kentucky, located at Evansville; Rayburn C. Austin, Michigan, located at Franklin.

#### INCOME TAX DATA

Gross income tax data which should give an excellent picture of the income of the medical profession will be available shortly at the offices of the income tax department. Accountants of the board are at work on the tax returns and their report probably will be available in time for publication in the next issue of *THE JOURNAL*. The report will be based upon the January collections and will cover practically a full year.

Meanwhile the income tax department has issued a bulletin listing nine types of income that are non-taxable under the Indiana law. These are:

1. Money received directly from the United States Government.
2. Outright gifts received by the taxpayer.
3. Inheritances received by process of law from the deceased in the form in which they existed at the death of the decedent.
4. Borrowed money or the repayment thereof when received.
5. Pensions, annuities or life insurance endowments insofar as the amount received is not greater than the amount paid in by the taxpayer to the pension fund or insurance company.
6. Receipts from life insurance by reason of the death of the insured.
7. Taxes collected as agent for the state or federal governments or any subdivision thereof.
8. Traveling expenses, if received strictly as such, having accurate account of such expenses is kept.
9. Receipts by reason of the maturity of bonds or of preferred stock.

Quarterly returns covering income from January first to March thirty-first, are due on or before April fifteenth. Blanks for making returns will be available at auto license branches throughout the state, according to Clarence A. Jackson, director of the gross income tax division.

#### EMPLOYMENT SERVICE

Under the auspices of the United States Department of Labor, the Indiana State Employment Service has been in operation seven months. Forty-eight thousand men and women have been registered. Information from these applications is filed so that training, experience, and even points of personality are quickly ascertained. Such records are made only after applicants have been personally interviewed by members of our staff designated as interviewers and so authorized by the United States Department of Labor.

Registrations include commercial and professional men, commercial and professional women, in-

dustrial men (skilled and semi-skilled), service and industrial women, and veterans' placement representative.

No fee is charged applicant or employer.

Offices are at 310 North Meridian Street, Indianapolis.

### VOICE OF THE DOCTOR

The following letter was received too late for inclusion in the March issue of *THE JOURNAL* at the time of publication of a first letter from Mr. Falk together with a reply to that letter:

Milbank Memorial Fund,  
40 Wall Street, New York,  
February 9, 1934.

My dear Mr. Hendricks:

My first temptation is to say that I am greatly surprised and disappointed by your letter of February seventh. The questionnaire which I sent you was intended, as it plainly indicated, merely to give us a general survey of the existing committees on medical economics of state and county medical societies. It is inconceivable to me that any information called for on that questionnaire could possibly lend itself to misinterpretation by us or by anybody else, or to any use other than a simple tabulation of how many committees are in existence and something on their activities.

On second thought, I must realize that your letter should have created neither surprise nor disappointment in my mind. Though I have had no direct contact and profess to know only very little of recent occurrences in medical and public health affairs in Indiana, I do recall now that persons whose integrity and judgment I have never had reason to question have expressed profound surprise at the recent course of events in the State of Indiana. I know from personal knowledge that such statements as Mr. Kingsbury has expressed, and such action as he has taken, have been dictated by the highest motives and have been based upon correct information on the events of which he speaks. In this, I would particularly call attention to the fact that I refer to what he has actually said and to what he has actually done, not to what newspapers or the editors of certain medical journals have alleged he has said, or have alleged he has done.

Finally, I am constrained to express to you my personal reaction to your letter. It would have been a very easy task for you to have ascertained my personal reputation among medical authorities. I think you could find no ground for any suspicion that a questionnaire sent out with a letter over my signature could be interpreted as having any ulterior purpose or any design other than that which I specified.

Yours sincerely,  
(Signed) I. S. FALK.

## DEATH NOTICES

JOHN J. RIFE, M. D., of Boston, died February seventeenth, aged ninety-two years. Dr. Rife was a graduate of the Cincinnati College of Medicine and Surgery in 1869.

FRANK WRIGHT, M. D., Indianapolis, died February ninth, aged seventy-five years. Dr. Wright was a graduate of the Indiana Eclectic Medical College, Indianapolis, in 1889.

MAX C. BARRETT, M. D., Knightstown, died February ninth, aged forty-four years. He graduated from the Indiana University School of Medicine in 1913.

FREDERICK KREMER, M. D., of Holton, died February thirteenth, aged sixty-six years. Dr. Kremer graduated from the Central College of Physicians and Surgeons, Indianapolis, in 1897.

B. B. MORROW, M. D., of Spiceland, died in Indianapolis, February twenty-seventh, aged sixty-one years. Dr. Morrow was a graduate of the Eclectic Medical College, Cincinnati, in 1897.

AARON G. ROGERS, M. D., of Parker, died February ninth. Dr. Rogers was eighty-four years of age, and had practiced medicine in Parker for more than fifty years.

W. A. SCHOOLEY, M. D., of Waldron, where he had practiced for forty years, died March seventh, aged sixty-nine years. Dr. Schooley graduated from the Medical College of Ohio, Cincinnati, in 1888.

CHARLES C. MARSHALL, M. D., Aurora, died March twelfth at Dillsboro. He was sixty years of age. Dr. Marshall graduated from the Medical College of Ohio, Cincinnati, in 1897.

M. B. HAZINSKI, M. D., of Indiana Harbor, died in a Hammond hospital, February seventeenth. Dr. Hazinski was thirty-eight years of age. He graduated from the Loyola University School of Medicine, Chicago, in 1926.

JAMES Y. MCCULLOUGH, M. D., New Albany, secretary of the Floyd County Board of Health, died February twenty-second, aged fifty-two years. Dr. McCullough graduated from the University of Louisville School of Medicine in 1907.

SAMUEL A. ROBERTS, M. D., of Salem, died March second, aged seventy-three years. Dr. Roberts was health commissioner of Washington County for an uninterrupted period of more than sixteen years. He graduated from the University of Louisville School of Medicine in 1882.

J. L. SMITH, M. D., retired physician of Hoagland, died February twenty-third, aged eighty-two years. Dr. Smith served as auditor for Allen County at one time, and had practiced medicine in Hoagland for more than fifty years. He graduated from the Eclectic Medical College, Cincinnati, in 1878.

CHARLES L. WILLIAMS, M. D., of Milford, president of the Decatur County Medical Society, died March tenth, aged seventy-one years. Dr. Williams was one of the founders of Alpha Omega Alpha and designed the key for that organization. He graduated from the University of Illinois College of Medicine, Chicago, in 1903, and was a member of the Decatur County Medical Society, the Indiana State Medical Association and the American Medical Association.

DILVER E. DOUGLAS, M. D., of Greensburg, died March fifth, aged sixty-three years. Dr. Douglas was widely known and had served one term as a Democratic member of the lower house of the Indiana General Assembly, representing Switzerland and Ohio counties. He was a member of the Decatur County Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from the Kentucky School of Medicine, Louisville, in 1897.

## HOOSIER NOTES

DR. JOHN MITCHELL, Salem, has been made health commissioner for Washington County to succeed the late Dr. S. A. Roberts.

DR. F. C. WYTENBACH, Indianapolis, has been appointed a first lieutenant in the medical reserve corps of the United States Army.

DR. E. L. MOCK, Bicknell, and Miss Elsie Mae Davis, Bicknell, were married at Newton, Illinois, February twentieth.

DR. HOMER WOOLERY, Bloomington, and Mrs. Maude Hughes, Bloomington, were married in Columbus, February seventeenth.



DR. W. T. VANDAMET, of Bloomington, and Miss Audrey Wettergren, of Jeffersonville, were married recently in Jeffersonville.

DR. W. T. LAWSON, of Danville, secretary of the Hendricks County Medical Society for many years, is ill in the Methodist Hospital, Indianapolis.

At a recent meeting, Mrs. Mabel Ellen Tracy, of the Methodist Hospital, Indianapolis, was elected president of the Indiana Association of Medical Record Librarians.

THE annual meeting of the Northern Tri-State Medical Association will be held at Flint, Michigan, April tenth. Dr. G. O. Larson, LaPorte, is president of the society this year.

DR. T. L. WILSON has opened an office at 302 East Kirkwood Avenue, Bloomington. He has been associated with Dr. Homer Woolery in the Woolery Clinic for the past year and a half.

DR. DILLON GEIGER, Bloomington, has opened an office at 306 East Fifth Street for the practice of medicine, specializing in care of eye, ear, nose and throat diseases.

DR. R. N. HARGER, Indianapolis, discussed "Alcohol from a Medico-Legal Standpoint" before members of the Indiana Insurance Adjusters' Association in Indianapolis, March fifth.

DR. O. N. TORIAN, Indianapolis, discussed the Indiana Division of Public Health and its method of operation at the study group meeting of the Indianapolis League of Women Voters, February fourteenth.

THE spring session of the Mid-Western Section of the American Congress of Physical Therapy was held in Indianapolis, March thirteenth. The evening session was held jointly with the Indianapolis Medical Society.

THE Ninth District Medical Society has secured for its meeting to be held May seventeenth, the following speakers: Dr. Ralph G. Carothers, Cincinnati; Dr. E. N. Kime, Indianapolis; and Dr. Charles P. Emerson, Indianapolis.

DR. FRED L. PETTIJOHN, Indianapolis, has been made chairman of the Indiana NRA adjustment board. The appointment, made by President Roosevelt, was announced by Fred Hoke, state director of the National Emergency Council.

DR. DONALD DAVIDSON has returned to Evansville from Boston, where he has been working in the Children's Hospital for the past two years. He will be associated in the practice of medicine with his father, Dr. William R. Davidson, of Evansville, and will specialize in orthopedics.

THE American Medical Golfing Association will hold its twentieth annual tournament at the Mayfield Country Club in Cleveland, June eleventh. Membership in the A. M. G. A. is open to any male Fellow of the American Medical Association. The executive secretary is Bill Burns, 4421 Woodward Avenue, Detroit.

DR. CHARLES P. EMERSON, Indianapolis, addressed the St. Louis County Medical Society at Duluth, Minnesota, on "Diseases of the Orient." On March third, Dr. Emerson gave the Alpha Omega Alpha address during the centennial celebration of the Ohio State University at Columbus, Ohio, his subject being "East and West."

THE seventh annual meeting of the Indiana Roentgen Society was held in Indianapolis, February twenty-second, with Dr. John Murphy, of Toledo, as the principal speaker. Officers for 1934 are: Dr. W. R. Cleveland, Evansville, president; Dr. D. C. McClelland, Lafayette, president-elect; Dr. Ross Tracy, Anderson, vice-president; and Dr. James N. Collins, Indianapolis, secretary-treasurer.

THE Tippecanoe County Medical Society will hold its regular monthly meeting, April twelfth, at the Lafayette Country Club. The meeting will be devoted to a discussion of genito-urinary work. There will be a meeting of urologists at the Lafayette Country Club, luncheon guests of Drs. W. W. Washburn and F. S. Crockett; in the afternoon there will be golf and other outdoor or indoor sports for those who wish to enjoy them; and in the evening the urologists will join the members of the Tippecanoe County Medical Society for dinner, after which Dr. William E. Lower, of the Cleveland Clinic, will present a paper entitled "Endocrine Factors in Prostatic Function." Dinner in the evening will be seventy-five cents and, according to Dr. Crockett, the cook at the Lafayette Country Club has a reputation for serving excellent food.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Hoffman-LaRoche, Inc.

Tablets Digalen-Roche, 1 Cat Unit  
National Drug Co.

Scarlet Fever Streptococcus Toxin for the Dick  
Test (National) fifty test package

Typhoid-Paratyphoid A Vaccine, thirty 1 cc. ampule-vials package

Parke, Davis & Co.

Ortal Sodium

Capsules Ortal Sodium, 3 grains (0.2 Gm.)

Sheffield Farms Co., Inc.

Sheffield B. Acidophilus Milk

John Wyeth & Brothers, Inc.

Ampoule Solution Dextrose 25 Gm. in 50 cc.

Ampoule Solution Dextrose 50 Gm. in 100 cc.

Announcement has been made of the establishment of a Maternal Health Clinic, in Room 426, at 307 North Pennsylvania Street, Indianapolis.

The clinic functions under the auspices of the Indiana Maternal Health League, and is conducted by a licensed physician assisted by two registered graduate nurses. Only indigent and semi-indigent patients are acceptable and must be otherwise eligible as specified in the following stipulations:

"1. No advice will be given to an unmarried woman, or to a married woman who is not living with her husband.

"2. No advice will be given to a woman who does not already have at least two living children, unless the physician in charge discovers sufficient medical reasons.

"3. Advice will be given to any married woman (providing she is living with her husband), when in the judgment of the clinic physician she presents bona fide medical reasons.

"4. No advice will be given any patient who is financially able to pay a private physician for such service.

"5. No patient will be given advice except when referred by a licensed physician or a recognized social agency, a signed statement of recommendation accompanying the patient."

It is requested that the statement of recommendation include medical, social, or economic reasons for maternal advice. Physicians and social agencies may obtain blanks for referring patients by phoning Lincoln 2666. White and colored patients are received at separate sessions. Licensed physicians and social workers of recognized agencies are invited to visit the clinic.

## INDIANA UNIVERSITY NEWS NOTES

DEAN B. C. GAVIT of the Indiana University Law School spoke on "The Privilege of Re-examination in Professional Licensure" before the recent joint session in Chicago of the Council on Medical Education and Hospitals and the Federation of State Medical Boards of the United States.

DR. R. J. WISEHEART, president of the Indianapolis chapter of the Phi Rho Sigma national honorary

medical fraternity, was toastmaster for the February banquet of the Bloomington chapter of the fraternity at Indiana University. Robert Royster is president of the Bloomington chapter.

THE annual formal initiation banquet and dance of the Indiana University chapter of the Phi Beta Pi, professional medical fraternity, were held March 9 and 10 at the Columbia Club, Indianapolis. John Eisterhold of Evansville is chairman of the spring social committee of the organization.

THE Phi Beta Pi, medical fraternity at Indiana University, has announced the pledging of the following students: Robert Pavy, Greensburg; Donald Lashley, Evansville; James R. S. Himebaugh, Speed; Richard W. Emme, Harlan; Robert Ben Johnson, Bloomington, and Walter M. Smith, Butler.

A BEQUEST for the use of worthy colored students of the Indiana University School of Dentistry has been made through the will of Mrs. Ella Clay, widow of Grant Clay, colored, who practiced dentistry in Indianapolis from the early 90's until his death in 1923. Various pieces of Indianapolis real estate, with the residue of the estate, will constitute a trust fund. The income of the fund is to aid colored students of dentistry.

DR. NOEL MCBRIDE, who received the M. D. degree from Indiana University School of Medicine in 1929, and Dr. Carl J. Rudolph, who was awarded the M. D. degree in 1931, recently won first and second appointments, respectively, to the Brooklyn (N. Y.) Eye and Ear Hospital. The selections were made on the basis of competitive examination. Dr. McBride formerly was associated with the Will's Eye Hospital, Philadelphia, and Dr. Rudolph with the Manhattan Eye, Ear and Throat Hospital of New York City.

PHI CHI, professional medical fraternity at Indiana University, initiated 23 pledges February twenty-fourth at the Columbia Club, Indianapolis, in connection with the annual Founders' Day celebration sponsored by the Indianapolis chapter. The annual banquet was held February twenty-third at the Athenaeum Club and following the initiation Saturday, a formal dance was given for the initiates. The men initiated are as follows: Douglas Barkley, Milton Erdel, John Hash, Kenneth Higgins, John Humphreys, John Davis, Ralph Arisman, Abraham Owen, Harold Hill, Ed Bloemker, William Strang, Fred Spencer, Harold Oliver, A. B. Scales, W. W. Reynolds, R. S. Ressler, W. C. Stafford, Joseph Riley, Marion Connerly, Thomas Johnson, Paul S. Connell, Wendell Preston, and Ramon Henderson.



TRIBUTE was paid February twenty-eighth to Dr. William N. Wishard, member of the faculty of the Indiana University School of Medicine, by the senior class of the medical school. The tribute was in the form of a dinner served at the Riley Hospital, Indianapolis, and was in honor of the sixtieth anniversary of the doctor's graduation in medicine. A number of prominent physicians who have been associated with Dr. Wishard in student and professional life were in attendance from New York; Philadelphia, Pa.; Louisville, Ky.; Lexington, Ky., and various communities in Indiana. Dr. Wishard is known as the "grand old man" of Indiana medicine. He has been a pioneer in surgery and has been among the leaders in advancement of the medical profession. He became superintendent of the Indianapolis City Hospital in 1879, when there was no other general hospital in the state. The veteran physician is a member of a family long associated with the profession in Indiana. His father, Dr. W. H. Wishard, made the first formal effort to obtain a general state hospital by resolution introduced in the session of the Indiana State Medical Association in 1868. A son, Dr. W. N. Wishard, Jr., is now associated with him in the practice of medicine in Indianapolis.

## BOOK REVIEWS

TREATMENT IN GENERAL PRACTICE. By Harry Beekman, M.D., Professor of Pharmacology at Marquette University School of Medicine, Milwaukee, Wis. Second Edition. Cloth. Price \$10. 785 pages exclusive of Bibliography and Index. W. B. Saunders Co., Philadelphia and London, 1934.

This latest volume of Dr. Beekman's would add to the value of the reference library of every practitioner of medicine, be his practice that of the general man or limited to one of the numerous medical specialties. The style of writing approaches the really literary and is most refreshing in this difference from the usual cut and dried medical texts.

The information given is basically sound. It is without frills. It is thoroughly presented by virtue of the discussions of the very recent advances as gleaned from the last-minute medical literature. Of particular interest and value is the author's system of cross-references carried in parentheses throughout the entire reading text.

## BOOKS RECEIVED FOR REVIEW

THE A B C OF REFRACTION. By F. D. B. Waltz, M.D. 86 pages. Illustrated. Cloth. Price \$1.00. F. D. B. Waltz, Detroit, 1933.

SURGICAL CLINICS OF NORTH AMERICA (Philadelphia Number, February, 1934). Volume 14, No. 1. 226 pages with 62 illustrations. Per clinic year (February, 1934, to December, 1934), paper, \$12.00; cloth \$16.00. W. B. Saunders Company, Philadelphia and London, 1934.

ALLERGY IN GENERAL PRACTICE. By Samuel M. Feinberg, M.D., F. A. C. P., Assistant Professor of Medicine and attending physician in Asthma and Hay Fever Clinic, Northwestern University Medical School. 339 pages. Illustrated with 23 engravings and one colored plate. Cloth. \$4.50 net. Lea and Febiger, Philadelphia, 1934.

PASSIONAL PSYCHOLOGY. Dr. Jacobus X. The American Anthropological Society, 70 Fifth Avenue, New York. 405 pages. Cloth. \$4.00.

TREATMENT IN GENERAL PRACTICE. By Harry Beekman, M.D., Professor of Pharmacology at Marquette University School of Medicine, Milwaukee, Wisconsin. Second edition, revised and entirely reset. 889 pages. Cloth. \$10.00 net. Philadelphia and London. W. B. Saunders Company, 1934.

## SOCIETIES AND INSTITUTIONS

ADAMS COUNTY MEDICAL SOCIETY met at the Memorial Hospital, Decatur, February twenty-third. Dr. H. O. Jones, of Berne, presented a paper on "Obstetrics." Letters from Senator Van Nuys and Representative Farley concerning the attitude against further hospitals for veterans were read. At the March ninth meeting of this society Dr. C. C. Rayl, of Decatur, presented a paper on "Diseases of the Colon."

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ALLEN COUNTY MEDICAL SOCIETY members enjoyed a clinical program featuring study of tuberculosis of the kidney and cancer of the lung, March sixth, presented by the staff of the Methodist Hospital, Fort Wayne. On March twenty-seventh the society members joined the members of the Isaac Knapp Dental Society on the occasion of the visit of Dr. Morris Fishbein.

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CASS COUNTY MEDICAL SOCIETY held its regular meeting at Logansport, February sixteenth. Dr. J. C. Vaughn, of Marion, talked on "Early Diagnosis of Gastric Carcinoma." P. J. Crowley, of Logansport, discussed the Tugwell bill. Attendance numbered twenty-five.

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CLINTON COUNTY MEDICAL SOCIETY has held regular meetings on January fourth, February first, and March first. Dr. E. B. Mumford, Indianapolis, was the guest speaker for the January meeting. His subject was "Fractures." At the February meeting, Dr. T. B. Noble, Sr., Indianapolis, was the principal speaker. He talked on "Cancer in Its Relation to the Large Bowel and Rectum." Drs. E. N. Kime and A. L. Marshall, Indianapolis, were guests at the March meeting. Dr. Kime presented a paper on "Neoplasms in the Aged."

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DEARBORN-OHIO COUNTY MEDICAL SOCIETY members met in Lawrenceburg, March eighth. Dr. James F. Treon, Aurora, gave an interesting paper on "Arteriosclerosis." Plans were discussed and made for the immunization campaign.

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DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY held its meeting at the Hotel Roberts, March twentieth, at 6:30. The usual scientific program was presented and matters of current interest were discussed.

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ELKHART COUNTY MEDICAL SOCIETY was addressed by Dr. Joseph L. Miller, of St. Luke's Hospital, Chicago, at the regular meeting of the society held in Elkhart, March sixteenth. His subject was "Case Presentations." Attendance was seventy-five.

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FAYETTE-FRANKLIN COUNTY MEDICAL SOCIETY met February thirteenth. Dr. John Fisher, of Cincinnati, discussed "Urological Problems."

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FLOYD COUNTY MEDICAL SOCIETY met at New Albany, March ninth, to hear Dr. Hugh Leavell, of Louisville, talk on "Allergy."

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GIBSON COUNTY MEDICAL SOCIETY met at the Methodist Hospital, Princeton, March twelfth. Dr. C. M. Clark, of Oakland, presented a paper on "Chronic Nephritis." Dr. Larue Carter, Indianapolis, talked on "Encephalitis B" at the February twelfth meeting.

GREENE COUNTY MEDICAL SOCIETY meeting was held February fifteenth in Linton. Miss MacDonald, of Indianapolis, spoke on "Federal Relief."

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HAMILTON COUNTY MEDICAL SOCIETY met at Westfield, February thirteenth, with Dr. P. E. McCown, Indianapolis, as the principal speaker. His subject was "Urethral Prostatectomy." Attendance numbered twenty-two.

The meeting held March thirteenth at Carmel was addressed by Drs. Horace M. Banks and Thomas J. Beasley, of Indianapolis. Their subject was "The Use of Selective Autogenous Vaccine in the Treatment of Bronchial Asthma."

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HENDRICKS COUNTY MEDICAL SOCIETY met at Danville, February sixteenth. Dr. Robert M. Moore, of Indianapolis, presented a paper on "Coronary Sclerosis."

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HUNTINGTON COUNTY MEDICAL SOCIETY met at the Hotel LaFontaine, Huntington, March sixth, to hear Dr. Harold Dunlap, of Indianapolis, discuss "Diagnosis and Treatment of Coiter." Dr. Dunlap's talk was illustrated with lantern slides. Attendance at the meeting numbered thirteen.

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INDIANAPOLIS MEDICAL SOCIETY held regular meetings during March, the March sixth meeting being addressed by Drs. M. N. Hadley, K. M. Koons, and William E. King. The March thirteenth meeting was held jointly with the Mid-Western Section of the American Congress of Physical Therapy, with addresses by Dr. Max Thorek, Chicago, and Dr. John Stanley Coulter, Chicago; and the March twentieth meeting was addressed by Dr. L. T. Coggeshall, Chicago.

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JAY COUNTY MEDICAL SOCIETY met at Portland, March second. Dr. James M. Pierce, of Cincinnati, talked on "Post Partum Care" and Dr. Carl A. Koch, of Cincinnati, talked on "Post Natal Care and Birth Injuries."

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JASPER-NEWTON COUNTY MEDICAL SOCIETY held a meeting at Goodland, with Dr. C. C. Bassett as host. February twenty-third. Dr. Simon Reiser, of Indianapolis, was the guest speaker, his subject being "Bismuth in the Treatment of Syphilis."

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KNOX COUNTY MEDICAL SOCIETY had a dinner meeting, March thirteenth. Dr. J. Smadel, of St. Louis, Missouri, presented a paper entitled "Observations During the St. Louis Encephalitis Epidemic." Number present was twenty-one.

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KOSCIUSKO COUNTY MEDICAL SOCIETY met at the Hotel Hays, Warsaw, February thirteenth. A general discussion formed the program. At the March thirteenth meeting twelve members were present.

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LAKE COUNTY MEDICAL SOCIETY met in dinner session Thursday, March eighth, at the Lake County Tuberculosis Sanitarium, with the scientific program presented by the sanitarium staff. Miss Frances Scoville, visiting nurse, gave a picture of tuberculosis as found in Lake County; her graphic charts were cleverly made, showing the distribution of cases, while her portrayal of her findings in the homes of the patients was exceptionally well presented. Dr. P. H. Becker, associate physician of the institution, discussed "The Sanitarium Treatment of Tuberculosis." Dr. J. A. Parramore discussed "The Diagnosis of Chronic Tuberculosis," using numerous case histories and illustrating his points with x-ray plates. He also had something to say on the subject of silicosis, stating that it had long since become one of the problems in Lake County.

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LAPORTE COUNTY MEDICAL SOCIETY held a meeting at the Spaulding Hotel, Michigan City, February fifteenth. Dr. James C. Carr, Chicago, discussed "Some Neglected Phases of Cardiac Disease" before the twenty-eight members present. At the March fifteenth meeting, held in Laporte, Dr. Earl R. McCarthy, Chicago, talked on "Surgery in Diabetes" and "The Undescended Testes." Attendance at this meeting numbered thirty.

LAWRENCE COUNTY MEDICAL SOCIETY'S regular monthly meeting was held March seventh in Bedford. Papers on "Sinusitis" and "Mastoiditis" were presented by Drs. Frank Martin and Norman Byers.

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MARSHALL COUNTY MEDICAL SOCIETY met at the Ross House, Plymouth, March seventh, at noon to hear Dr. E. J. Lent, of South Bend, talk about "Some Common Diseases of the Ear as Met by the General Practitioner." Number present was fifteen.

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MIAMI COUNTY MEDICAL SOCIETY held a meeting in Peru, February twenty-third. Dr. Don Bowers of Huntington presented a paper on "Etiology and Treatment of Pathology of the Lower Genital Tract with Especial Relationship to Trichomoniasis and Moniliasis."

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MUNCIE ACADEMY OF MEDICINE was addressed by Dr. Charles C. Higgins, Cleveland, in February. Dr. Higgins' paper was discussed by Drs. Henry Mertz and Ernest Rupel, both of Indianapolis.

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PARKE-VERMILLION COUNTY MEDICAL SOCIETY met at the Vermillion County Hospital, Clinton, February twenty-first. Dr. Gordon Batman, Indianapolis, presented a paper on "Fractures and Dislocations."

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PORTER COUNTY MEDICAL SOCIETY held a meeting at the Hotel Lemke, Valparaiso, February twenty-sixth. Dr. Stanley Fahlstrom, Chicago, discussed "Arthritis" before the twenty-two members present.

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POSEY COUNTY MEDICAL SOCIETY held its monthly dinner meeting in New Harmony, March eighth. Dr. Harold D. Lynch, Evansville, was the principal speaker. The February fifteenth meeting was held in Poseyville, with Drs. Boren, Smith, Woods, and Boren as hosts. Dr. Pierce MacKenzie, Evansville, the guest speaker, chose as his subject "Obstetrical Anesthesia."

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RANDOLPH COUNTY MEDICAL SOCIETY met at the Randolph County Hospital, Winchester, February twelfth. Dr. G. J. Garceau, Indianapolis, talked about "Common Foot Troubles" and made some references to baeache. Distribution of diphtheria and smallpox immunization material followed the meeting, and plans were made for the immunization campaign. The March twelfth meeting was held at the Randolph County Hospital, with Dr. W. D. Gateh, Indianapolis, as principal speaker. This was ladies' night, and in addition to the sixteen physicians present, thirty-four nurses and physicians' wives attended.

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RIPLEY COUNTY MEDICAL SOCIETY met at Versailles, February fourteenth, to hear Dr. Frank Downey, Dillsboro, talk about "Classification of Arthritis, Its Pathology and Treatment." At the March fourteenth meeting Dr. R. L. Smith, Osgood, discussed "Monstrosities in Obstetrics" and presented a ease report.

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SHELBY COUNTY MEDICAL SOCIETY members met in regular session in Shelbyville, March seventh. Dr. A. B. Graham, Indianapolis, spoke on "Care of Rectal Diseases by the General Practitioner" and Dr. Joseph Ricketts, Indianapolis, discussed "Cancer of the Rectum."

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ST. JOSEPH COUNTY MEDICAL SOCIETY met in South Bend, February twenty-first, to hear Dr. Herman L. Kretschmer, of Chicago, present a paper on "Changing Trends in the Treatment of Bladder Neck Obstruction." Attendance numbered seventy-two. At the February twenty-seventh meeting forty-three members were present. The paper of the evening, "A Critical Review of the Common Infections of Infancy and Childhood," was given by Dr. K. T. Knodel. Forty-eight members attended the March sixth meeting and heard Dr. David Bickel present a paper on "A Review of the Progress in Female Reproductive Physiology." At the March thirteenth meeting the society voted to continue the radio talks sponsored by the St. Joseph County Medical Society. At this



meeting Dr. Charles E. Savery presented a paper on "Clinical Application of Diagnostic Findings of the Eye, Ear, Nose, and Throat."

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SULLIVAN COUNTY MEDICAL SOCIETY members met at the Mary Sherman Hospital, Sullivan, March seventh, with Drs. V. A. Funk and Robert Moore, of Indianapolis, as guest speakers.

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TIPPECANOE COUNTY MEDICAL SOCIETY met in the Memorial Union Building, Lafayette, March eighth. Speaker for this meeting was Dr. Howard C. Ballenger, Chicago, whose subject was "Ear, Nose, and Throat in General Medicine."

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VIGO COUNTY MEDICAL SOCIETY held a meeting at Terre Haute, February thirteenth. Dr. James Spigler presented a paper on "Carbon Tetrachloride Poisoning." Attendance numbered twenty-seven. Cases of harelip and cleft palate and of third nerve paralysis were presented by Drs. Musselman and Richart. Motion was adopted to sponsor a radio talk over Station WBOW each Monday evening at 7:05.

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WABASH COUNTY MEDICAL SOCIETY members met at Wabash, March seventh. Dr. Bert Ellis, Indianapolis, was the principal speaker, his subject being "Laryngeal Conditions Leading to Tracheotomy." Attendance numbered twenty.

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WAYNE-UNION COUNTY MEDICAL SOCIETY met at the Richmond-Leland Hotel, Richmond, March twenty-second. C. Anderson Aldrich, M.D., of Chicago, presented a paper on "Treatment of Nephritis in Childhood."

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NORTHEASTERN INDIANA ACADEMY OF MEDICINE was addressed by Dr. Guy M. Cushing, of Chicago, February twenty-second. More than fifty physicians attended the dinner meeting held at the Gawthrop Hotel, Kendallville.

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SHELBY COUNTY MEDICAL SOCIETY met at the Strand Alcazar, Shelbyville, March seventh. Dr. A. B. Graham, Indianapolis, was the principal speaker, his subject being "Anorectal Diseases." Attendance numbered nineteen.

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HANCOCK COUNTY MEDICAL SOCIETY met at the Columbia Hotel, Greenfield, March nineteenth. Dr. Robert M. Moore, Indianapolis, presented a paper on "Some Factors in the Management of Patients with Heart Disease." Every physician in Hancock County is a member of the society and every dentist in the county is an affiliated member.

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#### THE INDIANA STATE MEDICAL ASSOCIATION EXECUTIVE COMMITTEE

February 9, 1934.

Meeting called to order at 4:00 p.m.

Roll call showed the following present: W. H. Kennedy, M.D., chairman; H. H. Wheeler, M.D.; E. E. Padgett, M.D.; O. O. Alexander, M.D.; W. J. Leach, M.D.; A. P. Weyerbacher, M.D.; J. H. Weinstein, M.D.; Albert Stump, attorney; and T. A. Hendricks, executive secretary.

#### Membership Report

Number of members on February 9, 1933.....	1,967
Number of members on February 9, 1934.....	1,983
Gain over last year.....	16
Number of members on December 31, 1933.....	2,709

#### Actions Left Over from the 1933 Annual Session, French Lick

(1) Codification of Constitution and By-Laws. Dr. Weinstein, past President of the State Association, made a suggestion at the first meeting of the House of Delegates at French Lick that there is a real necessity for the codification of the Constitution and By-Laws. He stated, "We have gone on for a number of years with a number of new resolutions and by-laws being passed. There are some mixups, some discrepancies.

It just appeals to me as for the benefit of our Secretary, for the benefit of our committees, and for the benefit of our incoming officers that it really is a necessity, and I would like to have a motion that we have the Constitution and By-Laws codified and printed." Motion made by Dr. Shanklin, seconded by Dr. Kelly, and carried by the House of Delegates that this be done.

At its October meeting the Executive Committee instructed the Secretary to make a study of this subject and report his findings at a later date. The Executive Secretary reported that as some discrepancies and conflicting paragraphs existed in the present Constitution and By-Laws, a special committee should be appointed to make a complete study of the Constitution and By-Laws and bring in a recommendation to be placed before the House of Delegates at the annual meeting in Indianapolis in October. The Executive Committee approved of this, and the following committee was appointed:

William N. Wishard, Sr., M.D., Indianapolis, chairman.

J. H. Weinstein, M.D., Terre Haute.

A. W. Cavins, M.D., Terre Haute.

Albert Stump, Indianapolis.

(2) No report made as yet on Dr. Weinstein's recommendation in regard to university hospitals. Dr. Jett and Dr. Crockett to report on this.

#### 1934 Annual Session at Indianapolis

(1) Meeting of the Committee on Scientific Work to be held Sunday, February 11. The entire matter of scientific program will be left up to the Committee on Scientific Work without any recommendations from the Executive Committee.

(2) Preliminary meeting of the General Arrangements Committee and local chairmen has already been held. Letter informing all allied organizations of the possibility of holding meetings on October 8, the day preceding the beginning of the annual session of the State Medical Association, was reviewed by the committee.

#### American Congress of Physical Therapy

Request of Dr. Edwin Kimc, chairman of the Local Arrangements Committee, that notices in regard to the meeting of the Midwest Section of the American Congress of Physical Therapy be sent to county society secretaries, brought to the attention of the committee. The committee said that a notice in regard to this meeting might be printed in THE JOURNAL, and that if the Secretary was sending out a bulletin to county society secretaries that a notice concerning this meeting might be included in that bulletin. The Executive Committee felt that if any extended notice in regard to this meeting were to be given it should be carried in a paid advertising page in THE JOURNAL.

#### Dr. Geisler's Resignation as A. M. A. Alternate Delegate

Letter received from Dr. Geisler, resigning as alternate delegate to the American Medical Association because of ill health. The committee voted its thanks to Dr. Geisler for his past services and expressed the wish that he may soon return to good health, so that he will be able to take an active part in the activities of the Association.

#### Postgraduate Course

The third annual postgraduate course of the Indiana State Medical Association is to be held April 26 at Evansville. Arrangements are being completed by the Postgraduate Committee which held a meeting on February 8 at the headquarters office.

#### Lloyd Shanklin

This man, who calls himself "Doctor," was giving a series of "free" health lectures at the Lincoln Hotel, Indianapolis. Dr. William R. Davidson, secretary of the State Board of Medical Registration and Examination, warned him that he was violating the law and told him that he was to desist from this practice or he was subject to arrest and prosecution in Indiana. Shanklin answered the letter stating that he was leaving Indianapolis.

#### *Answer to Milbank Memorial Fund Questionnaire*

Letter refusing to answer this questionnaire brought to the attention of the Executive Committee. The committee thought that the request and the answer should be carried in THE JOURNAL of the Indiana State Medical Association. (Published in March issue.)

#### *Possibility of Holding A. M. A. Meeting in Indianapolis*

A representative of the Indianapolis Convention Bureau called recently at the American Medical Association headquarters in Chicago and went over the possibility of having an American Medical Association meeting in Indianapolis at some future time. In a letter received from Henry T. Davis, secretary-manager of the Indianapolis Convention and Publicity Bureau, he states that Indianapolis has facilities for taking care of the American Medical Association meeting, the Murat Temple being particularly suited for such a meeting.

#### *Statement Concerning Activities of the Indiana State Medical Association*

The Executive Secretary suggested that a statement be prepared, to be sent to delinquent members concerning the activities of the Indiana State Medical Association. This statement is to be prepared and submitted to the members of the committee within the next few weeks. It is suggested that a paragraph be contained in this statement concerning the fact that within recent years, of all the malpractice cases in which the Indiana State Medical Association has been interested, only two have been lost and one has been settled.

#### *Michigan Afflicted Child Law*

This law and material concerning it, along with information on the Illinois State Medical Society "physically handicapped children's clinics," assigned for study to Dr. Wheeler.

#### *Dr. ——— Case*

———— is a member of the Indiana State Medical Association through his membership in the M ——— County Medical Society, but practices in R ——— County. He is not a member of the R ——— County Medical Society. Complaint over the fact that Dr. ——— has carried an advertisement in the press to the effect that he is a member of the Indiana State Medical Association has been sent to headquarters office. A by-law of the Association reads as follows:

Chapter X, Sec. 8—A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the society in whose jurisdiction he resides.

The attorney of the Association said that if Dr. ——— has his legal residence in M ——— County he can belong to that county society without permission of the R ——— County Medical Society. However, if his legal residence is in R ——— County, the M ——— County Medical Society must get the consent of the R ——— County Medical Society before he can become a member of the M ——— County Medical Society. Dr. ———'s 1934 dues have not yet been received at headquarters office.

#### *Honorary Membership of Dr. R. F. Frost, Huntington*

Question arises as to whether Dr. R. F. Frost of Huntington, who is eligible to honorary membership in the Indiana State Medical Association, but who is still in practice and wishes to retain the insurance feature of his membership, can still retain his malpractice defense protection in the State Association if he is an honorary member. The answer is "No." If a man takes advantage of honorary membership in the State Association, he no longer can receive the benefits of malpractice defense unless his regular \$7.00 state dues are paid, either by him or his county society.

#### *Suggestion That Indiana State Medical Association Send Delegates to Meetings of Neighboring State Societies*

Suggestion received from Harold M. Camp, M.D., secretary of the Illinois State Medical Society, that representatives from Wisconsin, Iowa, Missouri, Indiana, and Illinois be sent to the state conventions of other state societies. The committee instructed the Secretary to send an invitation to Dr. Camp as secretary of the Illinois State Medical Society, inviting delegates from Illinois to attend our annual meeting.

#### *Letter From Retiring Secretary of Delaware-Blackford County Medical Society*

Letter received from T. R. Owens, M.D., retiring secretary of the Delaware-Blackford County Medical Society, which reads as follows:

"This rounds out eight years as secretary of this organization, and while I feel that secretaries can be changed too often, it is not entirely desirable that they be carried too long. Contact with the state organization makes one appreciate the value of that organization to every practicing physician in Indiana, and should be shared by as many men in each county as possible. These contacts with the state organization have at all times been pleasant and inspiring. There is not a doctor in Indiana who has greater returns from seven dollars invested than those coming from the Indiana State Medical Association activities."

#### *Recognition of Indiana Men on A. M. A. Committees*

No Indiana man has a place on any of the committees of the American Medical Association as they appeared in the list of officers of the American Medical Association for 1933-34. Editorial concerning this was printed in THE JOURNAL, and correspondence between Dr. Shanklin, the editor of THE JOURNAL, and Dr. Olin West, Secretary of the American Medical Association, was brought to the attention of the committee along with a letter from Dr. Crockett.

#### *Medical Meetings*

(1) Thirtieth Annual Congress on Medical Education, Licensure, and Hospitals, February 12 and 13, 1934, Chicago. Dr. J. H. Stygall of Indianapolis always attends this meeting for the Bureau of Publicity. Dr. Tom Oberlin of Hammond, chairman of the Committee on Medical Education and Hospitals, was authorized by the Executive Committee to attend this meeting.

(2) Northwest Medical Conference, St. Paul, Minnesota, Sunday, February 25, 1934. Executive Secretary of the State Medical Association authorized to attend this meeting.

(3) Cincinnati Academy of Medicine, February 19, 1934. Talk on group hospitalization. Dr. Padgett authorized to attend this meeting.

#### *Indigent Sick*

(1) Arrangements completed in Shelby County.

(2) Fort Wayne (Allen County Society) protest to Washington in regard to the local situation for the care of the indigent sick under Rules and Regulations No. 7, FERA, brought to the attention of the committee.

(3) Vigo County negotiations reported off.

(4) Lake County situation still unsettled.

(5) Complaint of the secretary of the Washington County Medical Society, brought to the attention of the committee, along with all the correspondence.

#### *CWA*

(1) Report made that attempt has been made to obtain jobs in some medical fields for physicians who are needy.

(2) Situation in regard to transient indigents in Indiana outlined to the committee.

(3) Letters received from Louis Ludlow, congressman; William H. Larrabee, congressman; Harry Bassett, a member of the United States Employees Compensation Commission, and Dr. W. C. Woodward, director of the Bureau of Legal Medicine and Legislation of the American Medical Association, in regard to the CWA situation. All of these indicate that the government does not desire to enter the practice of medicine by assigning individual physicians to take care of workers who are injured or contract occupational diseases while in the employ of the government.

#### *Veterans' Hospitalization*

The following telegram of protest was sent to the two United States senators from Indiana in Washington:

MEDICAL PROFESSION OF INDIANA PROTESTS ANY LEGISLATION THAT WOULD RE-ESTABLISH ABUSES THAT OCCURRED IN HOSPITALIZATION OF VETERANS PREVIOUS TO THE PASSAGE OF



THE ECONOMY ACT WHERE NON-SERVICE CONNECTED CASES WERE TREATED FREE OF CHARGE AT VETERANS HOSPITALS ALTHOUGH ABLE TO PAY STOP PHYSICIANS ALSO OPPOSE CONSTRUCTION OF NEW GOVERNMENT HOSPITALS AS BEING ECONOMICALLY UNSOUND STOP IF THERE IS ANY BROADENING OF HOSPITAL BENEFITS TO VETERANS PROVISIONS SHOULD BE MADE FOR MEDICAL AND HOSPITAL SERVICES TO BE RENDERED BY HOME PHYSICIANS AND LOCAL HOSPITALS.

The Legislative Committee asked each county medical society to send similar protests to their congressmen.

#### *Immunization Campaign*

(1) Figures concerning this campaign from the office of Dr. Harvey follow:

1. To date material has been sent to sixty-seven counties which have designated their intention to come into this campaign.
2. There have been 110,000 consent blanks sent out by the State Division of Public Health to county medical societies on request.
3. Enough toxoid has been sent out from this office to immunize approximately 95,450 individuals.
4. Enough vaccine virus has been sent out to immunize approximately 43,920 individuals.
5. Approximately 7,000 sheets of publicity material have gone out from this office to various communities.
6. Physicians and motion picture machine operators have been sent from the division upon call from county medical societies to give lectures and film showings and to help organize programs in various communities.

(2) Copies of reports upon Boone, Union, and Allen county situations, prepared by Dr. Harvey, brought to the attention of the committee.

(3) Report made that Hancock County is to take up immunization work.

(4) Chiropractic protest in regard to the campaign brought to the attention of the committee.

(5) Letter from Dr. Ragsdale, enclosing reports from Clark, Orange, and Washington counties, brought to the attention of the committee.

#### *Group Hospitalization*

(1) Letters from Don K. Martin, executive secretary of the Ohio State Medical Association, and H. V. Y. Caldwell, executive secretary of the Academy of Medicine of Cleveland, brought to the attention of the committee.

(2) Program for the meeting of the American College of Radiology to be held at Chicago, February 11, appears to be a set-up for those favoring group hospitalization.

(3) Radio talk favoring group hospitalization by C. Rufus Rorem brought to the attention of the committee.

#### *The Journal*

Editorial Board voted to have all delinquent members taken from THE JOURNAL mailing list after June issue. Approved by Executive Committee.

Dr. A. W. Cavins of Terre Haute was asked to prepare articles for THE JOURNAL concerning distribution of authors of articles which have appeared in THE JOURNAL, and also speakers before the American Medical Association from Indiana. Dr. Cavins also will prepare an editorial note concerning the distribution of officers of the A. M. A., with particular reference to representation from Indiana during past years. Approved by the Executive Committee.

Contract with the editor of THE JOURNAL and the Council signed by the chairman of the council.

#### *Malpractice Cases*

- (1) Case No. 187—Bill for \$250 approved.
- (2) Case No. 188—Bill for \$150 approved for payment.
- (3) Case No. 192—Case dismissed. Bill for \$50 approved for payment.

There being no further business, the meeting was adjourned.

### INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

January 25, 1934.

Meeting called to order at 3:30 p. m.

Present: William N. Wishard, M.D., chairman; J. H. Stygall, M.D.; E. D. Clark, M.D., and T. A. Hendricks, executive secretary.

Release for publication in Tuesday morning papers, February 6, "Diphtheria—the Disease," read and approved.

A number of releases were approved for radio broadcast.

#### *Requests for speakers:*

January 31—Marion Kiwanis Club, Marion, Ind. "Preventive Medicine." Speaker obtained.

February 21—Parke-Vermillion County Medical Society, Clinton, Ind. Speaker requested to talk on "Fractures and Dislocation." Speaker obtained.

March 14—School No. 85, Indianapolis. Speaker requested to talk at 3:15 p. m. on "Foundations of Good Habits in Children. Steps Toward the Goal of Self-Reliance."

April 11—School No. 85, Indianapolis. Speaker requested to talk at 3:15 p. m. to Parent-Teacher Association on "Your Child and His Morals Through Practices of Daily Living."

June 7—Fountain-Warren County Medical Society, Covington, Ind. "Early Attention to Recent Skull Fractures and Incident Injury to Brain."

A letter was sent to the business manager of the Deaconess Hospital in Evansville answering his request concerning rules of the Bureau of Publicity in regard to broadcasts.

The rules of the Bureau in regard to broadcasting have been approved by the House of Delegates of the Indiana State Medical Association on several occasions and therefore have the force of law.

Notice brought to the attention of the Bureau of the Thirtieth Annual Congress on Medical Education, Licensure, and Hospitals to be held in Chicago on February 12 and 13, 1934. A member of the Bureau was selected to represent it at this meeting.

Request received from the health commissioner of Lake County to be placed upon the mailing list to receive Bureau of Publicity releases.

The following letter was received from the president of the Indiana Congress of Parents and Teachers:

"I am taking this opportunity to tell you how much we have appreciated the contributions from the State Medical Association carried in our state bulletin this year. We have had many favorable comments from both professional and lay people on the bulletin as a whole and on your contribution in particular. With the most attractive cartoon each month it has proven to be one of the most popular pages in the magazine, as well as one of the most valuable. I did appreciate the article on Immunization for I certainly think that the parents representing the lay people *must* be aroused. Just tonight I see in the paper where there is likely to be a school closed for at least a week; this all necessitated because of a near epidemic.

"... One other thing, do you wish us to use the name of the Medical Association as contributor? I used the name the first two issues; then it seemed a little hard to place the name in a good position without detracting from the appearance of the next month's issue so I did not use it, but I feel that it carries more influence to carry the contributor's name. I would be very glad if you had a suggestion to offer as to the arrangement of the page in any way. I shall hope to have your next contribution within the next few days."

It was the opinion of the Bureau that it probably was best to carry the name of the Bureau of Publicity of the Indiana State Medical Association in connection with its contributions.

Request received from the director of the Bureau of Health and Public Instruction of the American Medical Association for information in regard to the following three subjects:

1. What are the activities of your state society looking toward the spread of health information among lay persons?
2. What are the activities of your state society looking toward greater participation of the family doctor in public

health work, as, for example, supervision of well babies, immunization against diphtheria, smallpox and typhoid fever, examination of preschool and school children, and periodic health examinations of adults?

3. To what county societies in your state would you suggest that we address an inquiry similar to this in order to elicit facts concerning their activity toward educating the public with respect to health?

The secretary was instructed to send this information to the American Medical Association.

Letter received from the president of the Chicago Board of Health in regard to amebic dysentery.

Note received from an Indianapolis physician suggesting changes in the article by the Bureau of Publicity which appeared recently concerning the common cold. This physician suggested that the article recognize temperature changes in sleeping rooms and elsewhere as important factors in the causes of common colds.

The Bureau reviewed clippings on the immunization campaign.

February 2, 1934.

Meeting called to order at 3:30 p. m.

Present: William N. Wishard, M. D., chairman; J. H. Stygall, M. D., E. D. Clark, M. D., and T. A. Hendricks, executive secretary.

Release for publication in Saturday afternoon papers, February 10, "Appendicitis and the Depression," read and approved.

Radio release, Saturday, January 27, "Good and Bad Posture in Children."

*Requests for speakers:*

February 12—Gibson County Medical Society, Princeton, Ind. "Encephalitis B." Speaker obtained.

February 19—Madison County Medical Society, Anderson, Ind. "Organization of Speakers' Bureau." Speaker obtained.

October 8—Gibson County Medical Society, Princeton, Ind. "Head Injuries." Speaker obtained.

The Bureau approved a letter to the Bureau of Health and Public Instruction of the A. M. A. outlining the activities of the Association in the spread of health information.

Article in THE JOURNAL concerning the photographs of past presidents brought to the attention of the Bureau. The Bureau suggested that the county society secretaries be written and the names of past presidents coming from their districts be given each secretary with the request that information be sent to the historian as to how photographs may be obtained.

The following letter was received from the historian of the Association:

"Thank you so much for making available to me the various clippings of an historical nature which you have accumulated in your office. It is an excellent thing for the State Medical Association to have some fairly organized method, as you seem to have, for the collection of various things in the papers bearing upon medicine. Over a period of years these clippings alone will be of considerable value to the Society.

"Sometime I would like to discuss with you your ideas on the most efficient manner of filing them. I have them in a fireproof place, and of course the hospital building is as nearly fireproof as it could be made, so I feel they are fairly safe in the office.

"Some of the clippings contain pictures of past presidents of the State Medical Association, which is a help."

February 16, 1934.

Present: William N. Wishard, M. D., chairman; J. H. Stygall, M. D.; E. D. Clark, M. D., and T. A. Hendricks, executive secretary.

Release for publication in Saturday afternoon papers, February 24, "Indiana Basketball," corrected and approved.

Radio releases:

Saturday, February 3—"Diphtheria, the Disease."

Saturday, February 10—"Appendicitis and the Depression."

Letter received from the historian of the Association in regard to pictures of past presidents. Suggestion made that each living past president be written and asked to supply his picture.

Letter received from the director of the Bureau of Health Education, State Division of Public Health, in regard to reports on speakers sent out by the Bureau of Publicity to talk on diphtheria and smallpox immunization campaign. The bureau instructed the secretary to supply a list of the meetings for which the Bureau of Publicity has obtained speakers to talk on diphtheria and smallpox immunization campaign.

The bureau received a letter of complaint in reference to the personal publicity of a member of a county medical society. The Bureau of Publicity instructed the secretary of the State Medical Association to send a copy of the letter and also the article to the local county medical society of which the physician against whom the complaint is made is a member. Time and again the Bureau of Publicity has gone on record to the effect that no physician's name should be used in the daily press that may create personal publicity. On several occasions the reports of the Bureau of Publicity embodying this rule have been approved by the House of Delegates, which gives this rule of the bureau the effect of an ethical mandate. The code of ethics of the American Medical Association disapproves personal publicity. The executive secretary was instructed to prepare a letter along this line and present it for approval at the next meeting of the Bureau of Publicity.

Questionnaire from the Bureau of Health and Public Instruction of the American Medical Association concerning the subject of health education in the schools presented to the bureau. It was suggested that the material required in this questionnaire be obtained from a physician who is thoroughly familiar with this question of health education in the schools.

Letter received from the president of the Board of Health of the city of Chicago in regard to amebic dysentery.

Radio release upon the Copeland-Tugwell bill received from the Bureau of Health and Public Instruction of the American Medical Association. This release, which was originally written for a fifteen-minute broadcast, was to be cut to fit the five-minute broadcast of the Bureau of Publicity of the Indiana State Medical Association over a local radio station.

INDIANA DIVISION OF PUBLIC HEALTH  
COMMUNICABLE DISEASES REPORT FOR  
FEBRUARY, 1934

Diseases	Feb. 1934	Jan. 1934	Dec. 1933	Feb. 1933	Feb. 1932
Tuberculosis .....	111	167	101	229	196
Chickenpox .....	475	907	741	593	542
Measles .....	2,191	1,432	248	73	408
Scarlet Fever .....	1,049	998	870	554	541
Smallpox .....	7	14	15	7	76
Typhoid Fever .....	10	6	13	13	14
Whooping Cough .....	244	182	199	136	471
Diphtheria .....	130	191	291	160	237
Influenza .....	303	329	187	414	400
Pneumonia .....	57	83	42	79	110
Mumps .....	96	131	38	206	377
Polioomyelitis .....	1	1	3	3	3
Meningitis .....	7	8	7	7	30
Amebic Dysentery .....	1	0	0	0	0

REPORT ON THE THIRTIETH ANNUAL CONGRESS ON  
MEDICAL EDUCATION, LICENSURE AND HOSPITALS,  
FEBRUARY 12 AND 13, 1934,  
CHICAGO

February 28, 1934.

*Philosophy of Professional Licensure. Justin Miller, J. D., Dean, Duke University School of Law, Durham, N. C.*

Mr. Miller stated that one of the greatest trials of the medical profession is the encroachment of miracle working religionists and psychological charlatans. And yet, although it is generally known that many medical cases are mental rather



than physical in nature, and over 50 per cent of the hospital beds in the country are devoted to mental and nervous cases, still we find in some medical schools and among many physicians a strange resistance to the experimental work of psychology and a stupid unwillingness to develop the field of psychiatry.

While the profession cannot be required to perform miracles, it can be and is expected to devote a reasonable attention to the field. Failure to do so is unfair to the public and the profession. If it be true, as has been stated, that from 40 to 60 per cent of all operations for appendicitis are unnecessary and that a considerable portion could be avoided by a proper psychiatric diagnosis, then the public has only a little more to fear from fakers than from physicians.

Regarding licensure, Dean Miller said it is a problem whether to keep standards as the law profession has done; so low that the profession is constantly concerned with the problem of eliminating shysters, or as physicians have done to keep the standards so high the profession is constantly concerned by activities of quacks and fakers outside.

The success of the medical profession in eliminating great plagues, such as yellow fever and smallpox, has done more to dramatize the integrity and usefulness of the profession than all the engaging bedside manner of the ages.

The accomplishments of preventive medicine have no counterpart in criminal law.

Urging more emphasis on cultural courses for medical students Dean Miller quoted from the *Journal of Association of Medical Colleges* as follows: "Our students are the most uninteresting of men. They are ignorant of either art or literature. They only read sporting papers and cheap magazines. They do not even know their own language, nor can they spell. They are, in fact, semi-illiterate."

Alphonse M. Schwitalla, S. J., Ph.D., St. Louis, in discussing Dean Miller's paper, stated that state board licensure members should be of the highest type. Students should be graded on moral character as well as professional knowledge.

*Medical Education and Its Relationship to Society as a Whole.* Robert G. Sproul, LL.D., President, University of California, Berkeley.

Dr. Sproul said there is an over-supply of physicians in the United States, the percentage per population being double that in leading European countries. The over-supply of physicians tends to lower standards of ethics, cause fee splitting, illegal operations, etc. The average age of beginning practitioners is 22 to 28 years. The professional group should be limited to a sufficient number for adequate medical care. Last year there were 16,000 applicants for medical colleges and only 6,200 were accepted. There should be a better distribution of physicians. The majority of medical graduates practice the art and not the science of medicine. Too many doctors are little more than plumbers. The development of general practitioners should be encouraged. They should be doctors of humans and coordinators of specialists. They should be taught to recognize health before sickness. Too early specialization should be discouraged.

*The Restoration of the General Practitioner.* Dean Lewis, M.D., President, American Medical Association, Baltimore.

Dr. Lewis said the general practitioner fared better in the depression than the specialist. An average of 36 per cent of all graduates specialize. Seventy-five per cent of Johns Hopkins graduates specialize; 64 per cent of Harvard and 26 per cent of Jefferson Medical College graduates specialize. Only 2 or 3 per cent of graduates who are from small communities return there to practice.

The importance of a thorough physical examination should be emphasized and laboratory measures used only when necessary.

He pointed out that the depression had done much to restore the old order and convince many people that they could be treated satisfactorily in their homes by their family physicians.

He answered Dean Miller's appendicitis remarks by inquiring if he secured his information from the chief psychiatrist in a mental hospital or from one of the inmates.

Dr. Lewis also referred to lay experts' advice in regard to hospital affairs. One Ph.D. advised all charity beds in a teaching hospital and another one advocated all private cases for a similar purpose. This reminded him of a story. A spectator at a football game who was imbibing of "ginsthetic sin" had been calling the plays before the ball was snapped. He was wrong every time and when the home team got down to their opponent's nine-yard line a man sitting next to him asked, "What are they going to do now?" The inebriated one said, "I have got them down this far and will let them finish it out without my help."

James B. Herrick, M.D., Chicago, discussed Dean Lewis' paper. He said the old type general practitioner has largely passed. The new type must possess knowledge, character and personality. Too many medical graduates do not know the meaning of the word thorough. A mediocre doctor who does not know his limitations is dangerous. The best textbook for the practitioner is the patient.

*Size and Scope of a University Clinic.* Henry Houghton, M.D., Director of University of Chicago Clinics.

Dr. Houghton said the university clinics were criticized for making a great deal of money, and that it could not apply to the University of Chicago clinics, which have an annual deficit in excess of \$200,000. They also are criticized for competing with local doctors, and he said they afforded less competition than if the doctors in the clinics were practicing out in the community.

Dr. Nathan B. VanEtten, Vice-Speaker of the House of Delegates of the American Medical Association, New York, said lay domination of medical matters should be avoided and medicine should be the master of its own house. University clinics should help the medical practitioner but should never compete with him.

John H. J. Upham, M.D., Dean of the Ohio State University College of Medicine, Columbus, said the free hospital clinic should give the hospital patient after care, act as a feeder for the hospital, be a teaching center, and carry on a social welfare program.

The pay clinic should be an aid to the medical practitioner, afford economic relief to the patient and should only take patients referred by the family doctor.

Dr. Austin A. Hayden, Chicago, President of the Chicago Medical Society, asserted that a free out-patient clinic is necessary for medical teaching, but pay patients should not be accepted.

There were 1,000,000 clinic visits in Chicago last year and 10,000,000 office visits. Eighty per cent of Chicago University medical students finish at Rush Medical College. There is a \$4,000 deficit per student at Chicago Medical.

Only 6 per cent of the clinic patients are referred by the family physician.

Deans of medical schools should take more interest in their graduates' problems. They should attend their medical meetings and become more familiar with the complexities of practice.

Every medical school should have a course in economics.

*The Privilege of Re-examination in Professional Licensure.* Bernard C. Gavit, J.D., Dean, Indiana University School of Law, Bloomington.

The average of medical failures is much less than law failures because the medical graduates are all from class A schools. The average of medical failures in the United States is 7 per cent, while the average of law failures is 55 per cent.

There are 185 law schools of which 55 are commercial. Only one state (New Mexico) requires approved law school graduates for registration. Ninety per cent of failures finally pass. Re-examination should be limited to two trials. Eighteen state medical boards do not allow examination after the third failure.

*Résumé of the History and Present Application of Medical Licensure in the States.* J. N. Baker, M.D., Secretary, Alabama Board of Medical Examiners, Montgomery.

Dr. Baker said his state had the only pure medical board. The members are all graduates of a regular class A school and only graduates of regular class A schools are examined. He said 15 states include homeopaths and eclectics on their boards. Fifteen have mixed boards with osteopaths and chiropractors as members. Eighteen states have multiple boards for examination of various cults, etc.

*The Importance of Introducing Psychiatry into the General Internship.* Franklin G. Ebaugh, M.D., Director, Division of Psychiatric Education, the National Committee for Mental Hygiene, Denver.

Dr. Ebaugh stressed the importance of including psychiatry in the general internship. He urged that psychiatry be made a part of the basic preparation for practice of medicine, and it also should be considered a requisite for licensure.

*The Incorporation of the Principles of Preventive Medicine in Clinical Teaching.* Wilson G. Smillie, M.D., Professor of Public Health Administration, Harvard University, Boston.

Dr. Smillie advocated methods of teaching in medical schools which would prepare physicians to practice preventive as well as curative medicine. He said the relationship of the practitioner of medicine to the community has not changed fundamentally in the last fifty years, although revolutionary changes are taking place in the social structure.

*Review of the Accomplishments of the Council on Medical Education and Hospitals of the American Medical Association.* Ray Lyman Wilbur, M.D., Chairman, Stanford University, California.

Dr. Wilbur reviewed the remarkable achievements in medicine since the turn of the century, especially the abolishment of chaos in medical education and the elimination of commercial medical schools, but asserted that a new national survey of medical schools, hospitals, and the practice of medicine is urgently needed.

He stated the survey should bring out inadequacies in present medical education and lead to a better development of graduate instruction so all physicians may have the opportunity of keeping up to date, get rid of antique, obsolete and unimportant subjects in medical courses, training men to practice medicine without loading them up with masses of unessential information. Preventive medicine must be stressed and obstetrics must include more prenatal care. Dentistry and nursing must be more closely related to medicine and methods of dealing with mental observations must be improved.

Respectfully submitted,

J. H. STYGALL, M.D.

#### DECATUR COUNTY MEDICAL SOCIETY

March 9, 1934.

Whereas, Dr. D. E. Douglas has been a member of the Decatur County Medical Society since his residence in Greensburg, Indiana, and has always been active in furthering the success of the society and stood for the things which made for its betterment; and,

Whereas, The death of Dr. D. E. Douglas is an irreparable loss to our society and to the community;

Therefore, be it resolved, That the Decatur County Medical Society extends to his family its sympathy and condolence; and,

Be it further resolved, That a copy of these resolutions be spread upon the records of our society and a copy be sent to the family.

EDEN T. RILEY,  
W. E. THOMAS,  
W. C. CALLAGHAN,  
Committee.

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# THE JOURNAL

OF THE

## INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

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### ORIGINAL ARTICLES

#### CANCER OF THE UTERUS\*

ETIOLOGY, DIAGNOSIS  
AND TREATMENT

ARTHUR H. CURTIS, M. D.  
CHICAGO, ILL.

Cancer is curable. In saying this, I do not intend to paint an optimistic picture, then to go home and tell half a dozen people in a row that "cancer is a terrible disease and we will do the best we can but of course the outlook is always bad."

As a matter of fact, half of my private patients with uterine cancer are permanently cured, and a majority of the remainder are arrested sufficiently long to give them comfort and happiness for enough years to make the word "arrested" a term of real value.

With our poorer and less enlightened patients the story is far different. The need of education of the public is nowhere so manifest as in the contrast between our private patients with cancer and our charity cases. I venture that we have cured not more than 5 per cent of the charity cases on our services at St. Luke's and Passavant Hospitals, these patients entering chiefly through the hospital outpatient department and the gynecological clinic of Northwestern University.

The reasons for the great disparity in results in these two classes of cases are self-evident: in the group of charity cases we often encounter ignorance of the patient so profound that she overlooks entirely the warning of inexplicable bleeding until too late; still worse, there is often early attendance by physicians who fail to make a pelvic examination, or who, when they do examine, show an ineptitude for diagnosis greater than they exhibit in almost any other aspect of medical practice.

Dean, of Madison, has pointed out the greatly increased morbidity and mortality of appendicitis in Wisconsin during recent years, since appendicitis has become a neglected issue and medical men

have ceased to think earnestly and actively about it. So, with cancer, we must, I suppose, reiterate and emphasize those facts which should be common knowledge to us all. In carrying out this thought, please be patient if I emphasize points already well known to most of you.

#### SPECIAL FEATURES OF ETIOLOGY

A consideration of special features in the etiology of cervical cancer should include a few words about its frequency. Our impression that cancer of the human body, and particularly cancer of the human uterus, is on the increase, may be put down as erroneous if we accept world statistics on this problem. Of course mass statistics are misleading, and we often prefer personal impressions, limited though they be in their scope. Yet it is important to know that tabulated reports of all sorts—governmental, institutional, and private studies—show no increase in cancer other than that inevitably accompanying the greater span of life enjoyed, or perhaps I should say endured, at the present time.

Our present campaign against cancer has some drawbacks, yet it must be continued, and I am enthusiastically for it. A pelvic examination twice a year, of all women of cancer age, and more often of those with suggestive symptoms, should be a minimum requirement. We physicians as a group, presenting a united front, must be able to assure the public that a pelvic examination, by anyone who is permitted to make it, is with the guarantee of the profession that the one who examines is fitted to give dependable advice after study of the available evidence.

In furtherance of the thought of routine examinations, the problem of correction of lesions of the cervix at once presents itself. Since school days I have had a laboratory and have been interested in the follow-up study of pathologic tissues removed. With the passage of time I have, in this work, become increasingly more impressed with the menace of the unhealthy cervix. Markedly diseased tissues and threatening lesions should be removed much more often and more thoroughly than in years past. But *healthy* women are coming to us now, free from symptoms, and solely for prophylactic service. It is unnecessary to emphasize the need to be worthy of the trust placed in us, but I am

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constrained to lay weight on the folly of meddlesome surgery, the correction of symptomless lacerations which do no harm and excision of other lesser lesions which offer no real menace.

Statistics indicate that childbearing does not predispose to the development of cervical cancer. Likewise, a study of the influence of repeated childbearing indicates that parity is not a notably important etiologic factor. It is perhaps wrong to raise a dissenting voice based on personal experience, yet I am impressed that childbearing is not only a factor, but an important one, in the etiology of cervical cancer.

Cancer developed in the cervical stump after hysterectomy has received much consideration. The growth has already been present and overlooked at the time of the supravaginal hysterectomy in most of the cases of cancer of the cervical stump which I have encountered. Some of my friends, notably Keene, have not had that experience. Still others point to the volume of statistics now available and assert that cancer of the cervical stump has, after all, scarcely more than a normal incidence.

The influence of cervical stricture in the etiology of cancer has been of much interest to me. I shall discuss this feature very briefly at the time of showing you a drawing of a uterus opened after removal. For the moment, I may summarize by stating that I am more than ever impressed with the importance of obstructed uterine drainage as a factor in the development of carcinoma of the body of the uterus and of the cervix.

#### DIAGNOSIS

As the result of intensive microscopic studies it has been accepted that cancer of the external cervix practically always begins where the columnar epithelium of the cervical canal meets the squamous epithelium of the vaginal cervix. In the case of an erosion this place of transition may be some distance removed from the anatomic external os. It seems probable that cancer rarely develops elsewhere on the vaginal portion of the cervix.

Hinselmann, with a slight magnification of from 3 to 10 diameters, finds a frequent incidence of scaly, parchment-like, leukoplakic areas on the cervix. He believes these are the forerunners of cancer and that cancer is *always* preceded by leukoplakia.

Schiller's gram's iodine test for early cervical cancer has many warm advocates. I cannot yet speak enthusiastically about it.

Thus far, I have continued to place reliance on old-fashioned methods without notable aid from modern refinements. A development of recent years has introduced a rather serious handicap here, and merits our attention. It is the rubber glove. In common with most of my confreres, I employ gloves in making pelvic examinations; they add to surgical cleanliness and prevent transmission of infection, but a glove-covered finger lacks

delicacy of touch. Digital examination which yields friable, freely-bleeding tissue upon manipulation with the index finger is the most reliable diagnostic evidence of cervical cancer, and I have many times failed to obtain this characteristic bleeding and friability until removal of the glove and palpation with the bared finger. Direct digital contact should be resorted to in early cases of difficult differentiation.

Local extension of cancer, as we all know, is characterized by infiltration of the adjacent vaginal wall or broad ligaments. Determination of the degree of broad ligament fixation is of the utmost importance. Until relatively recent years, thickening in the broad ligaments and adjacent tissues was accepted as an invariably grave sign. We now know that broad ligament fixation is often ascribable to a previous pelvic infection or cellulitis incident to infection of the ulcerated cervix, and is not certain evidence of extension.

I need not point out to you that endocervical cancer is common and that cancer of the body of the uterus is immeasurably more frequent than in former years; therefore, palpation of a healthy external cervix and determination of a well-placed normal sized uterus does not suffice. Intrauterine examination is imperative in bleeding patients of cancer age, notably if the flow is gushing or occurs in the interval between menstruations.

The study under anesthesia of a patient suspected to have a malignancy of the uterus should be made more painstakingly than is customary. Perhaps it is childish to emphasize the need of excellent illumination, adequate exposure, and deliberate study. But it is habitual with all of us to overlook these important attributes of a satisfactory examination. I refer, of course, only to those cases in which the diagnosis is difficult, or cancer rather unlikely, but search for it under anesthesia necessary because of suggestive symptoms.

Delivery of the uterus to the vulva is of much help in such cases. In practically every instance except far advanced cancer with fixation or high grade pelvic cellulitis, the cervix may be brought to the vulva or beyond.

#### TREATMENT

Removal of carcinoma of the cervix as an independent curative measure must be by radical surgery, such as the Wertheim operation. Simple hysterectomy is wholly inadequate. If it is to be successful, the operation must be done not only by a skilled surgeon but by one who has a constant supply of material of this character if he is to do the work with facility and sufficient skill to assure results equal to those obtainable with ray therapy. Even the skilled gynecologist who operates rather infrequently on carcinoma of the cervix is not sufficiently practiced to do himself justice in these cases.

Of necessity, most men must turn to radium treatment or a combination of radium with x-rays



or diathermy, aided insofar as advisable by associated surgical measures. Fortunately the results of radium therapy in the hands of those who have studied its use equal or surpass the best surgical results. Radium has the advantage that one can master its technic somewhat more easily, although it, too, is difficult to employ expertly. A further advantage of radium is that daily or very frequently repeated experience in the treatment of cases is not necessary for the gynecologist to keep sufficiently well informed to give good service.

If the malignancy is ulcerated, clearing up of the infected cervix is a preliminary requisite. This may be accomplished by surgical diathermy or by palliative doses of radium.

After one or two months, with the superficial lesion well healed, in those cases with extensive necrosis or destruction of the cervix the procedure of choice is placement of radium on the cervix or, much better, the use of a bomb, which affects the cancer similarly and at the same time screens off the adjacent vulnerable tissues.

Granted that the lesion is not badly ulcerated or widely extensive, perhaps classified as Grade I according to our accepted nomenclature, I prefer the introduction of radium in chain tandem into the uterine canal, at the same time burying needles of radium or radon in a palisade encircling the cervix, the needles inserted preferably well outside the gross extent of the malignancy.

Finally, I believe the time is at hand when we will enter an era of combined surgical exposure and radium application. This may be by abdominal exposure with burying of radon seeds under the guidance of a hand in the vagina, or it may be solely by the vaginal route.

#### DISCUSSION

F. C. WALKER, M. D., Indianapolis: We must learn to be more cancer-conscious than we are. Dr. Curtis has splendidly brought before us the importance of the consideration of cancer. There are just a few points that I wish to emphasize; I cannot add anything.

The cervix has more cancer than any other organ of the body. There are a few special reasons for this:

First, two kinds of epithelium meet there, and we know that is a likely place for cancer.

Second, the cervix is the most frequently injured piece of tissue of the body. We hear it said once in a while that injury does not have much to do with it. I believe that injury has a great deal to do with it, particularly those injuries that carry infection.

Third, there is more infection in the cervical canal than in any other place in the body.

Fourth, the most frequent symptom that is complained of in women's diseases is discharge, which is usually secondary to infection. We have these four things present in women so frequently.

Another thing that is quite evident and which

has been demonstrated many times, is that before cancer can occur any place in the body there must be something preceding it or leading to it. I know of no place in the body where we find a more beautiful example of pre-cancerous lesions than in the cervix uteri, for the reasons I have just given. Again, most of the cancer that we find in the uterus or cervix occurs in women who have had children, and to me that is very significant. Again, most of the cancer occurs in the neck of the uterus—(about ninety per cent) which also emphasizes the fact that injury and infection must have something to do with the production of cancer, because we very seldom have chronic infection or injury within the body of the uterus, showing that the most important thing in this condition is diagnosis.

I hope and believe that physicians are more enlightened at the present time, and take into consideration the signs and symptoms which women complain of early. Unfortunately, some do not come to us soon enough. If they did not bleed physiologically from the genital tract they would present themselves earlier. I believe that accounts for the army of women living today who suffer from cancer, because they look upon bleeding as a physiological process, and I am sorry to say that too many doctors look upon it, particularly from the genital tract, as being a recurrence or disturbance of menstrual activity, when really it is malignant pathology. When a woman presents herself, she should never be turned away without examination, and that examination should be thorough and complete.

Doctor Curtis speaks of using the finger. I am glad he brought out that point. It is all right to use a glove, but many times you gain information with the finger without a glove that you cannot get otherwise.

Another point that I think is important: If there is any question whatever, the patient should be anesthetized if necessary to get a piece of tissue for microscopic analysis. Many times that can be done in the office without any anesthetic. That gives you a definite answer, and these women should never be sent away if there is any question about the cause of the bleeding.

A word about treatment. Doctor Curtis spoke about radical surgery which should be used in some cases, but it seem to me that we can do more today with radium than we can by surgery, and it is much easier for the patient, for it requires no hospitalization, no particular pain, and no long anesthesia. What Doctor Curtis said about surgical operation, that a man must keep practiced in that sort of operation, is true, because even though you remove the uterus completely, you are apt to get recurrence. Radium is simple to use, and it is remarkable the results you will get in some cases that seem absolutely hopeless. In six months or a year you often find the patient is practically well. It seems to me that today the most successful wea-

pon we have with which to fight cancer is radium. Where one does surgery I think it should be used with radium plus x-ray.

The important thing is this—to teach and have understood that it is not the well developed cancer we want to recognize, but it is the things that may lead to cancer. I am a firm believer that the best method of treating cancer today in the neck of the uterus is to treat those conditions which lead to cancer. I do not say that will cure cancer, but when a woman presents herself I think it is a good thing to clean out the cervix, no matter what it takes. I firmly believe the time is coming when we must do these things more completely and successfully, and that somebody will find some way, some chemical agent which will have a selective affinity for cancer cells, and when that is done, we will have made a wonderful discovery.

J. R. PUGH, M. D., Hammond: I wonder if Dr. Curtis would say a word about the dosage, particularly of the needles.

ARTHUR H. CURTIS, M. D., closing: Those who have used radium over a period of many years have gradually come to the belief that the best dosage varies from 3500 to 5000 millicuries. In other words, 100 milligrams for 35 hours, or half that amount for twice as long; simply use the multiplication table.

In radium application coincident with surgical exposure we have thus far limited the real treatment with radium, not the earlier prophylactic treatment, to a dosage of 3500 millicuries.

As a corollary to Dr. Walker's remarks: If a patient has no evidence of cancer, but there is a very bad cervix, I tend to the removal of the entire diseased area rather than to taking out a small fragment. Otherwise, the patient will go along for a year or two and we then have the same problem confronting us.

## PELLAGRA IN INDIANA AND ITS TREATMENT\* †

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Pellagra is generally considered to be a disease endemic in the southern states, due to a deficiency of vitamin B<sub>2</sub> or G in the diet. It is characterized by a dermatitis, glossitis, high incidence of achylia gastrica, diarrhea, central nervous system involvement, and eventually death. Many of the symptoms and postmortem findings are similar to those seen in patients having pernicious anemia. Both diseases are apparently deficiency diseases, pellagra being a disease of dietary origin and pernicious anemia a disease secondary to the failure of secre-

tion of the "intrinsic factor of Castle" in the gastric juice. The exact relationship of the two diseases has not been established as yet.

Although pellagra is found more often in the South, frequent reports in the more recent literature demonstrate that pellagra does occur in the northern states, and during periods such as we have been experiencing more cases of pellagra are to be expected. It is the purpose of this paper to present a few of the cases seen in the Indianapolis City Hospital during the last two years. These cases represent quite clearly the various types of the disease found in Indiana.

The first three cases must be classed as true (endemic) pellagra, there being apparently no etiological agent other than deficient diet.

CASE 1, a white male, aged 18, moved from Indianapolis to Kentucky in August, 1929. While there he lived on a diet restricted to pinto beans, salt pork, and cornbread. In the spring of 1932, just previous to the development of a severe diarrhea, he weighed 130 pounds. Soon a glove-like dermatitis of the hands and sore mouth and tongue developed. The dermatitis cleared on a small amount of yeast, but the diarrhea and sore mouth persisted. The patient lost weight and became progressively weaker.

On returning to Indianapolis in October, 1932, his diet was as bad, if not worse than when in Kentucky. He entered the Indianapolis City Hos-

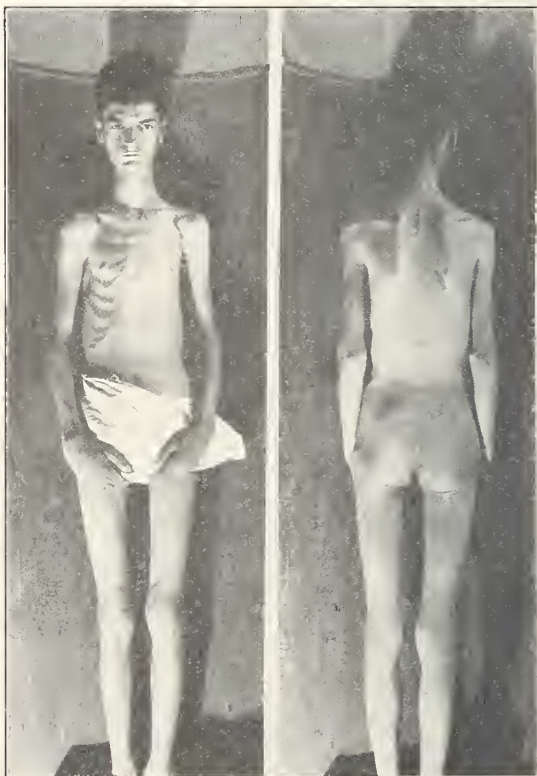


Fig. 1. Case 1 on May 16, 1933, at beginning of intravenous liver extract therapy.

\* The Lilly Laboratory for Clinical Research, Indianapolis City Hospital, and the Department of Medicine, Indiana University School of Medicine.

† Presented before the Seventh District Medical Society at Plainfield, October 20, 1933.

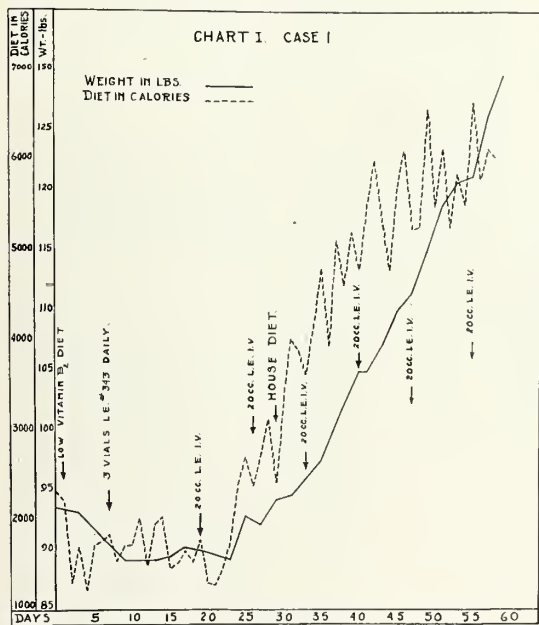


pital on November 7, 1932, weighing 94 pounds. He was placed on a high vitamin diet and yeast, and by January 15, 1933, he weighed 101 pounds, and the diarrhea could be controlled by bismuth and paregoric. He left the hospital on that date and returned to the diet supplied by the township trustees. The symptoms rapidly returned, and he was readmitted to the hospital on April 25, 1933, weighing 93 pounds (Figure 1.) There was a slight dermatitis of the hands and the diarrhea was very severe. The red blood cell count was 2.92 million, hemoglobin 61 per cent, and white blood cell count 7,000. The red blood cells were larger than normal and there was no achromia. The blood smears could not be differentiated from those seen in patients having pernicious anemia, except for the fact that there was no decrease in blood platelets. Gastric analysis after histamine revealed slightly decreased amounts of acid and enzymes.

From May 2, 1933, to May 15, 1933, the patient received three vials of Liver Extract No. 343 per day by mouth. The diarrhea could not be controlled by bismuth and paregoric and there was no improvement in the condition of the patient. His weight decreased to 89 pounds. On May 15, 1933, he received intravenously the amount of liver extract derived from 100 grams of whole liver. Within five days his appetite increased so that instead

has taken liver extract by mouth and by injection. He is symptom-free and now maintains his weight at 149 pounds, and the red blood cell count is 6.47 million and hemoglobin 89 per cent.

CASE 2, a white female, aged 37, the mother of the preceding patient, under the same conditions first developed pellagra in May, 1931. This improved on yeast, but in the spring of 1932 she did



Weight and daily caloric intake of patient having pellagra (case 1) showing response to medication.

of consuming about 1,500 calories per day, he soon was consuming as high as 6,580 calories per day. The diarrhea rapidly disappeared and his weight increased from 89 to 129 pounds in forty days (Figure 2). Chart I shows the increased caloric intake and increase in weight following the therapy. Since his discharge from the hospital on June 24, 1933, he has returned to the same diet, but

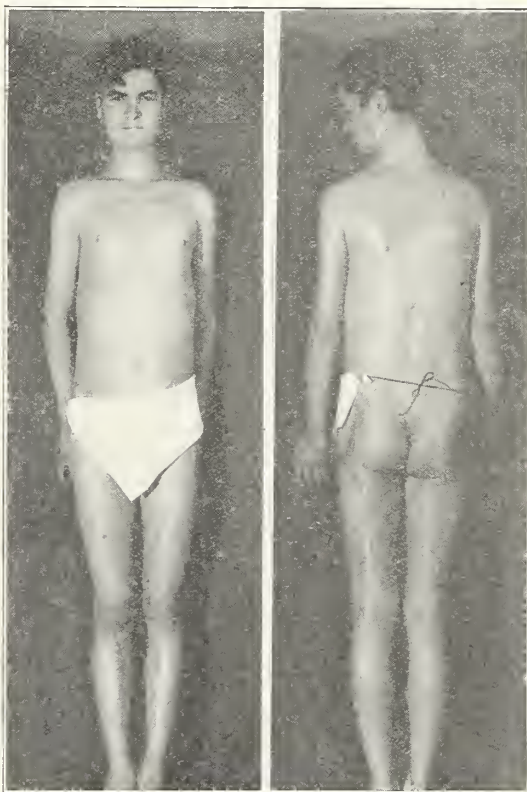


Fig. 2. Case 1 on June 23, 1933, after month of liver extract therapy.

not receive her supply of yeast from the government and the pellagra returned. At this time the son and a daughter also developed pellagra. The dermatitis improved on a small amount of yeast, but the sore mouth, sore throat, burning in the chest and stomach, and the diarrhea persisted with remissions and exacerbations. In December, 1932, she also returned to Indianapolis and ate only the food supplied by the trustees. Her symptoms became progressively more severe and she became so weak and emaciated that she was admitted to the City Hospital on February 23, 1933. At that time she weighed 72 pounds (weight previous to onset of illness was 110 pounds). There was no dermatitis, but the tongue was red and beefy, there was a severe diarrhea, and the patient was markedly emaciated. The red blood cell count was 2.09 million, hemoglobin 54 per cent, and white blood cell count 5,300. There was a marked macrocytosis present and no achromia of the red blood cells. The blood platelets were not reduced in number.

The patient showed no improvement when she received a vitamin B preparation intravenously or yeast by mouth. On April 11, 1933, she weighed 70 pounds (Figure 3). On that day she received her first intravenous injection of liver extract. Her improvement was quite spectacular, and although she returned to the diet supplied by the trustees within ten days after the first injection of liver extract, she has shown steady improvement on weekly injections of liver extract and liver extract administered by mouth. (This has been supplied since she left the hospital.) Her weight now is 124 pounds (Figure 4). The red blood cell count is 5.48 million and hemoglobin 80 per cent.

CASE 3, a white male, aged 50, had been getting his food from the "soup kitchen" for two years. His diet had been limited to bread, skimmed milk, and soup. In May, 1932, a slight dermatitis of the feet developed. This disappeared in a few weeks, but he had felt tired and weak since then, and during the winter of 1932 pains in the lower extremities developed. On about June 18, 1933, dermatitis of the hands and dorsum of the feet, diarrhea, sore mouth and throat, conjunctivitis, and photophobia developed. He entered the hospital on June 28, 1933. The dermatitis of the hands was clearing rapidly within a few days on no specific therapy, but the other symptoms remained. The right hand was then exposed to sunlight for one hour and the dermatitis of this hand returned. House diet plus three vials of liver extract per day rapidly cured the dermatitis and diarrhea, but the pains in the lower extremities still persist.

The exposure of one hand to the sunlight in a suspected case of pellagra without cutaneous lesions as an important aid in the diagnosis was suggested by the recent work of Smith and Ruffin.<sup>1</sup> Bass<sup>2</sup> reports that exposure not only to the sunlight, but to heat, pressure, trauma, and irritating chemicals, is capable of producing the cutaneous lesions during an active phase of the general disease.

In the second group of cases the pellagra developed following other organic diseases.

CASE 4, a white male, aged 55, gave a typical history of gastric cancer for a period of two years previous to the development of the pellagra. His diet had been restricted due to financial conditions, but it was further restricted because of the pain associated with the gastric cancer. Gastro-intestinal x-rays revealed a large lesion involving the pyloric end of the stomach, causing partial retention. There was an achylia gastrica and the red blood cell count was 3.2 million and the hemoglobin 58 per cent. This patient had typical

cutaneous lesions of pellagra and a sore mouth, but no diarrhea. The patient did not remain in the hospital for treatment.

There have been many reports in the literature of pellagra associated with benign and malignant lesions in the gastro-intestinal tract. This literature was reviewed by Eusterman and O'Leary<sup>3</sup> when they reported an additional thirteen cases. Eight of these had obstructing benign lesions or dysfunction (late after operation) of the upper part of the digestive tract; two had obstructing carcinomatous lesions; one, gastric syphilis; and two, lesions in the colon (one carcinomatous and one inflammatory).

The second case in this group (Case 5) has had chronic infectious arthritis since 1929. Associated with this condition she has had a very poor appetite and frequent attacks of nausea and vomiting, and has lost fifty pounds in eighteen months. In July, 1933, she developed a diarrhea and sore mouth. Exposure to the sun for fifteen minutes produced a definite glove-like dermatitis of the hands. The symptoms of pellagra disappeared when a high vitamin diet was forced. The arthritis still persists, however.

The last group of cases makes up by far the majority of cases of pellagra seen in the northern part of the United States. The association of pellagra with chronic alcoholism has been pointed out by Klauder and Winkelman,<sup>4</sup> Sweitzer,<sup>5</sup> Shattuck,<sup>6</sup> and others. In Spies' and DeWolf's<sup>7</sup> series of seventy-three cases of pellagra 90 per cent gave alcoholic histories. They reported studies tending to



Fig. 3. Case 2 on April 18, 1933, at the beginning of intravenous liver extract therapy.



support the hypothesis that alcoholic pellagra is a form of true (endemic) pellagra and not a pseudo-pellagra due to some specific action of the alcohol. The affected individual, due to a long continued use of alcohol, loses his appetite and substitutes drink for food, thus favoring the production of pellagra.

Six of our series of cases gave strong alcoholic histories.

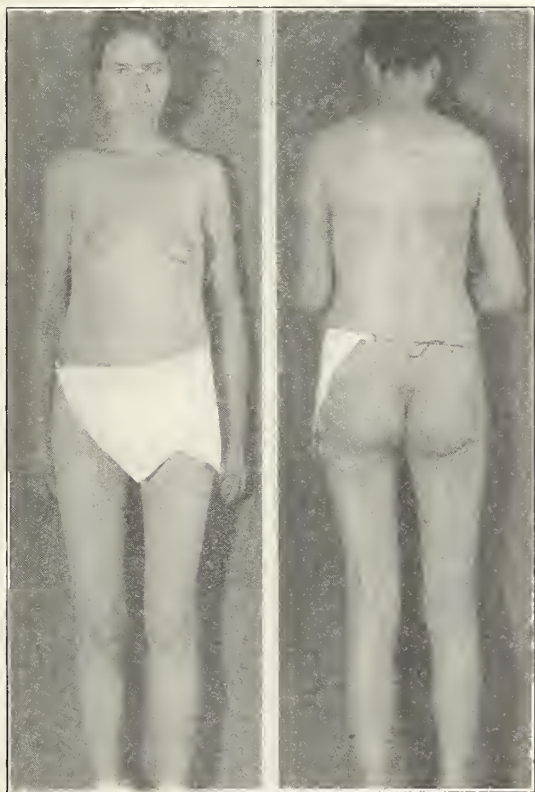


Fig. 4. Case 2 on July 26, 1933, after three months of liver extract therapy.

CASE 6, a white male, aged 39, for many years a periodic drinker, after a period of six months on a diet almost entirely restricted to alcohol, developed a diarrhea, sore mouth, and a dermatitis of the hands, extensor surfaces of the arms, and a small amount on the dorsum of the feet. Two months later he entered the hospital. An achylia gastrica was present and the red blood cell count was 4.6 million and hemoglobin 82 per cent. The diarrhea and dermatitis disappeared when the patient received a high vitamin diet and yeast, but the achylia persisted after two years.

CASE 7, a white male, aged 31, for eighteen months had lived on a diet of alcohol, beans, coffee, bread, and potatoes before he developed mild dermatitis and diarrhea and severe pains in the lower extremities. After three months he entered the hospital. All the symptoms, except the pains in the legs, improved on a good diet and three cakes of brewer's yeast a day.

CASE 8, a white male, aged 60, with marked arterio-sclerosis and a history of chronic alcoholism, had a dermatitis of the hands each spring for four years. Because of severe weakness he had been unable to work for one and one-half years, and he had lost 23 pounds in the four years of illness. He entered the hospital with a dermatitis, diarrhea, and a very poor appetite. The pulse was almost imperceptible. In spite of large amounts of yeast the diarrhea persisted and the patient refused to eat the high vitamin diet offered. The course was steadily downward and he died after thirty-one days on treatment.

CASE 9, a white female, aged 33, entered the hospital in a comatose condition. Her relatives stated that she had been drinking large amounts of alcohol for several months. Two months previously a dermatitis, sore mouth, and diarrhea had developed. A dementia had developed two weeks before she entered the hospital. For three or four days she had been comatose. The patient died during her first day in the hospital.

CASE 10, a white male, aged 55, was a moderate drinker. After the removal of his teeth he went on a cereal diet. Six months before entering the hospital he developed a mild dermatitis of the hands and a severe diarrhea, with the resulting loss of weight. Mild dementia was present. On a good diet the patient improved, but one month later he returned to the hospital with a marked dementia, for which he was transferred to a state hospital.

CASE 11, a colored female, aged 30, who gave a history of chronic alcoholism, developed abdominal pain in December, 1932, and neurotic pains in January, 1933. Marked anorexia and a severe diarrhea started in April. She lost weight rapidly during her illness and three to four days before entering the hospital the skin over the hands became much darker. She entered the hospital on June 1, 1933. A high vitamin diet was ordered, but the patient took very little of it due to the anorexia. The diarrhea became worse and a marked dermatitis of the hands and wrists and marked excoriation about the anus developed. Her mouth was sore. She became delirious and appeared to be acutely and severely ill. The pulse was very weak and fast, and moderate dyspnea was present. Physical examination on June 28, 1933, revealed the marked dermatitis of the hands and wrists, red beefy tongue, excoriation about the anus, and marked hypersensitiveness and edema of the lower extremities. There was an achylia gastrica and the red blood cell count was 3.47 million, hemoglobin 57 per cent, and white blood cell count 12,250. The red blood cells were smaller than normal and were slightly achromic. She weighed 110 pounds. Because of her critical condition, she received intravenously the amount of liver extract derived from one hundred grams of whole liver and was started on Liver Extract No. 343, three vials per day, by mouth. A noticeable improvement in her general

condition was noted the next day, and she showed rapid improvement in her symptoms. However, pains in the hands and feet still persist. Her weight is now 136 pounds. The red blood cell count is 4.6 million and hemoglobin 80 per cent.

### SUMMARY

This group of patients indicates that more care should be taken in selecting the diets supplied to the indigent by the various poor relief groups. It also indicates that all cases giving histories of restricted diet for any reason, chronic alcoholism, or chronic gastro-intestinal disturbances should be watched for signs and symptoms of pellagra. The value of exposure of an extremity to the sunlight as an aid to the diagnosis of cases of pellagra without cutaneous manifestations is again emphasized.

This series of cases also demonstrates that the neurological symptoms of pellagra are more resistant to treatment than the other symptoms, and too encouraging prognoses for the neurological symptoms should not be given. Similar results are encountered in the treatment of pernicious anemia. At the present time the cases of pellagra with neurological symptoms are receiving large quantities of vitamin B<sub>1</sub> by mouth to determine the efficacy of this treatment.

Liver extract has been shown to be one of the best sources of vitamin B<sub>2</sub> or G<sup>3</sup> and in addition it contains the "active principle" effective in pernicious anemia. It has not been shown as yet which of these constituents causes the spectacular results when the liver extract is injected parenterally into patients having pellagra. However, it can be said that the parenteral use of liver extract in patients having pellagra with severe diarrhea or decreased absorption from any other cause and in those who refuse to eat, is life saving. Ramsdell and Magness<sup>6</sup> have reported very favorable results in 22 cases of pellagra treated by only liver extract administered intramuscularly. They suggested that the fact that most pellagra patients refuse to eat sufficient food is the probable reason for many observers reporting poor results in the treatment of the disease, thus discounting the efficiency of vitamin G therapy. Case 8 and Case 11 demonstrate this fact. Case 8 refused to eat and his course was steadily downhill. Likewise, Case 11, although she was offered a very liberal diet, became progressively worse until she received the liver extract by injection. It would therefore seem that the parenteral use of liver extract in all severe cases of pellagra is indicated.

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## PERORAL ENDOSCOPY\*

### AN INDISPENSABLE AID IN THE EARLY DIAGNOSIS OF MALIGNANT DISEASE OF THE LARYNX\*

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Much has been written about laryngoscopy and bronchoscopy in the removal of foreign bodies from the air passages, but these procedures have not been employed to the extent that they should be in the cases of diseases of these passages. Too often patients with chronic hoarseness or difficulty in swallowing, which is due to a beginning malignancy, are treated over a long period of time without the real cause of the trouble being determined; or the condition is improperly diagnosed until it is too late to effect a cure. If a careful, direct examination with the laryngoscope is made early, the lesion may be detected and its character determined by biopsy. A tendency on the part of both the profession and the laity to regard persistent hoarseness as the after effect of a cold in the head or a chronic laryngitis is amazing and deplorable. These patients should always be given the benefit of a complete and thorough examination by a competent laryngologist. A direct examination of the larynx with the laryngoscope can be made easily and with very little discomfort to the patient. It is not a difficult or painful procedure. It is the only method by which a complete inspection of the interior of the larynx can be made, and it should be made a supplementary procedure to the mirror examination.

Cancer of the larynx occurs in the later years of life and affects males much more frequently than females. It is rare to find it before forty years of age, although there are cases on record occurring at an earlier age; for instance, a man of twenty-three years and a girl of sixteen years.<sup>1</sup>

There is not sufficient time allotted to the essayist to discuss etiological factors and the precancerous condition in relation to cancer of the larynx. Suffice it to say that the etiology of laryngeal cancer is still undetermined. For a discussion of precancerous conditions in the larynx, the reader is referred to that excellent article by Chevalier Jackson, entitled "Cancer of the Larynx; Is It Preceded

\* Presented before the Section on Ophthalmology and Otolaryngology of the Indiana State Medical Association, at the French Lick Session, September 27, 1933.



by a Recognizable Precancerous Condition?" in the *Annals of Surgery* for January, 1923.

According to Jackson, intrinsic cancer of the larynx occurs most often in the "anterior-intrinsic area" including the anterior two-thirds of the true vocal cords, the adjacent portions of the ventricles, and the anterior commissure.<sup>2</sup>

It is a well known fact that intrinsic laryngeal cancer is very slow in spreading and remains well defined and limited for a long period of time. This is due not to an insufficient lymphatic drainage within the larynx, but rather to a failure of the lymphatics to anastomose with the neighboring lymphatics. On the contrary, the interior of the larynx is abundantly supplied with lymphatics which, however, drain into two small glands on each side of the larynx.

#### PATHOLOGY

MacKenty gives the following classification of malignant tumors of the larynx: carcinoma, 98 per cent; sarcoma, 2 per cent. Of the relative frequency of the carcinomas, squamous cell constitutes 96 per cent; basal cell carcinoma, 2 per cent; papillary carcinoma, 1 per cent; adenocarcinoma, 1 per cent.<sup>3</sup> Because of the great variation in degree of malignancy of cancers of the larynx, and because of the importance of this knowledge in selecting the best treatment and giving the prognosis, Gordon B. New advocates the classification of Broder which is made on a gradation of one to four. Carcinoma graded one is little more than a benign lesion which does not metastasize, and the prognosis is good with proper treatment. Carcinoma graded four, on the other hand, is highly malignant and metastasizes early. According to New, "Differentiation of the growth as to its histologic character is sometimes more important as regards treatment and end results than the technic of operation or the particular method of operation employed."

In intrinsic cancer, the one symptom which is constant and which should lead both the patient and the physician to a complete investigation is persistent and progressive hoarseness. It is usually insidious in its onset, and the patient attributes it to a cold or a sore throat or some other ailment. This may last for months before the patient finally comes for examination. There ordinarily is no cough, dysphagia, or other symptoms, except that the patient may complain of fatigue of the voice after prolonged use. This early and constant symptom of hoarseness, persisting over a period of time, cannot be too strongly emphasized and should always be regarded with suspicion. Examination of these cases will always reveal a lesion of one cord in the early stages, and this fact in itself is sufficient to arouse suspicion as to the possibility of malignancy and warrant a most careful and painstaking examination. While intrinsic cancer may attack any part of a vocal cord, as already pointed out, it occurs most frequently in the anterior two-thirds. The growth may appear

as a simple, projecting, semi-pedunculated tumor resembling a papilloma, or as a superficial but limited infiltration which may go on to ulceration, and as an embedded infiltration.

While intrinsic cancer is very slow in developing, once it has penetrated or spread upwards and backwards to the aryepiglottic fold or arytenoids, it spreads very rapidly because of the rich vascularity and abundant lymphatic supply of the region; when this occurs, it is practically always fatal (usually in twelve to eighteen months from the time when the symptoms become definite and persistent). Extrinsic cancer may originate on the epiglottis, aryepiglottic fold, posterior surface of the cricoid ("postericoid cancer"), and in the pyriform sinuses.

The symptoms produced by extrinsic cancer of the larynx are more pharyngeal in character. There is no alteration in the voice such as occurs in intrinsic cancer until the later stages. There may be a huskiness to the voice due to disturbance in the secretion of mucus and saliva. There may be a sensation of discomfort in the throat and also dysphagia when the lesion involves the hypopharynx. Because of the absence of early symptoms, patients fail to consult the physician until the disease is well advanced.

#### DIAGNOSIS

The differentiation of early cancer from other diseases of the larynx causing hoarseness is one of elimination. The conditions from which cancer must be differentiated are:

1. Simple, chronic inflammations occurring secondarily to infected teeth, tonsillitis, sinusitis, chemical irritants, excessive use of the voice, etc.;
2. Specific chronic inflammations: (a) syphilis; (b) tuberculosis, including lupus; (c) scleroma;
3. Keratosis;
4. Pachydermia;
5. Blastomycosis;
6. Perichondritis;
7. Hematoma;
8. Benign growths: (a) papilloma; (b) angioma; (c) fibroma; (d) Singer's nodes;
9. Paralysis;
10. Prolapse of the ventricle of the larynx;
11. Hysterical aphonia.

Of these conditions, syphilis, tuberculosis, and cancer present the greatest difficulties in differential diagnosis and it is well to keep in mind the following points:

1. A careful clinical history is of the utmost importance.
2. Tuberculosis of the larynx is generally secondary to pulmonary tuberculosis, so that pulmonary tuberculosis is excluded by the usual diagnostic methods. In the presence of a positive diagnosis, a lesion in the larynx is not necessarily tuberculous. It may so closely resemble a syphi-

litic lesion that both a biopsy and a therapeutic test may be necessary for diagnosis.

3. To exclude syphilis, a Wassermann test is first made. If positive, the lesion should improve rapidly under antiluetic treatment. If negative, and lues is still suspected, a therapeutic test should be made, avoiding the use of potassium iodide because of the danger of producing an edema of the larynx. If no improvement occurs, syphilis is excluded. It should be remembered that cancer may occur in a patient with syphilis or tuberculosis as illustrated by cases reported by Tucker<sup>5</sup> and Mac-Kenty<sup>6</sup> in which tuberculosis and cancer occurred in the same lesion.

4. Tuberculosis is bilateral and usually occurs in the posterior part of the larynx, on the arytenoids and in the space between the arytenoids. Pain, dysphagia and ulceration are early symptoms.

5. Syphilis generally involves the whole interior of the larynx and may simulate any of the forms of chronic laryngitis, tuberculosis, syphilis or malignant disease. Its development is practically painless, rapid, and diffuse. A diagnostic point is that it yields promptly to treatment.

6. Early intrinsic cancer is always unilateral, occurring on the anterior two-thirds of one cord, and is non-inflammatory. There may also be partial loss of the mobility of the cord on the affected side unless the growth is very superficial. Ulceration, pain, and dysphagia are late symptoms.

7. Biopsy should be resorted to as a final procedure. In some instances it is absolutely necessary for an accurate diagnosis. Biopsy should never be attempted except in direct laryngoscopy, for no other method offers as complete a view of the structures on the interior of the larynx. In making a biopsy, a portion of the normal tissue should be included with the growth. It is the consensus of opinion of most laryngologists that biopsy should not be performed unless the patient has consented to and is prepared for operative interference in case of a positive diagnosis of malignant disease. Operation should follow biopsy as soon as possible. In this regard, the following comments and statistics bearing on the relation of biopsy to extension as compiled by New<sup>7</sup> are of interest: "In all cases in which the condition is not self-evident, biopsy is done immediately before operation. We have never seen any ill effects from this; however, in cases of carcinoma of the larynx in which biopsy has been made with some trauma and without being followed by operation before the patient came to the Mayo Clinic for examination, the seriousness of the condition seemed to be enhanced, and it was in this group of cases that recurrence was most common. An attempt has been made to determine the relation of biopsy and the delay in removal of the growth to microscopic extension of the carcinoma. It was found, in reviewing the number of extensions from the various grades of tumors observed in specimens from the

cases in which biopsy had been done elsewhere and operations delayed and in the specimens from the cases in which biopsy had not been done, that the difference in the two groups was not outstanding. In twenty-nine cases in which biopsy had been done and surgical intervention had been delayed there were thirteen (44.87 per cent) extensions. In the seventy-one cases in which no biopsy was made there were twenty-six (36.6 per cent) extensions. In the twenty-nine specimens for biopsy there were nine carcinomas graded two from which there were no extensions. In considering the high grade carcinomas as a group, there were twenty cases in which biopsy was done with thirteen (62 per cent) extensions. In forty-seven cases of high grade carcinomas in which biopsy was not done, there were twenty (42.5 per cent) extensions. However, several factors must be considered in comparing these two groups. In many of the cases biopsy was done without trauma, and it was the delay in operation alone that may have been the major factor in the increase in the number of extensions. The infection secondary to the trauma, if this is marked, probably is significant in the increased seriousness of cases in which biopsy is done. It should be emphasized, however, that in carcinoma of the larynx biopsy should not be done until the surgeon who is to operate on the patient has made a careful examination, and until the patient is ready and willing to go ahead with the radical operation if the condition is found on biopsy to be malignant."

#### CONTRAINDICATIONS TO OPERATION

Conditions in which operations other than palliative are contraindicated may be enumerated as follows:

- (1) High degree of malignancy in those cases in which the extent of the growth into the extrinsic area is doubtful.
- (2) Cases with metastatic foci.
- (3) Cases in which complete removal of the whole growth and all the lymphatic extensions is impossible.
- (4) Organic disease.
- (5) Suppurative foci in the teeth or sinuses.
- (6) Patients with pronounced and irreparable metabolic imbalance.
- (7) Alcoholism.
- (8) Advanced age.
- (9) Feebleness.

#### TREATMENT

Most laryngologists believe that the only possible hope of cure or prolongation of life in intrinsic laryngeal cancer is through surgical intervention, with a few exceptions which are mentioned later. There is great difference in opinion between those advocating total laryngectomy and those advocating the more conservative operation, laryngofissure. It is only in comparatively recent years that total laryngectomy with its former surgical



mortality of about 50 per cent, but now with an improved technic and a resulting lower surgical mortality of about three per cent, has gained predominance over thyrotomy or laryngofissure. The reason for this is because most laryngologists in this country believe that laryngectomy in carcinomas of doubtful extent offers the best chance of a cure, so that it is performed in preference to thyrotomy in the majority of cases. In England, however, statistics show that laryngofissure is performed more often than laryngectomy, perhaps because of the general recognition of chronic hoarseness as an early symptom of malignancy; perhaps because patients consult a physician when the disease is in its incipency, and so the diagnosis is made earlier.

For purposes of classification, cancer of the larynx may be divided into: (a) anterior intrinsic; (b) posterior intrinsic; and (c) extrinsic.

In regard to endolaryngeal operation for laryngeal cancer, Jackson believes<sup>8</sup> "that the uncertainty of removal of a sufficiently wide zone of adjacent normal tissue without cutting through the growth itself, renders the attempt inadvisable" and the procedure should be confined solely to the extirpation of tumors confined to the tip of the epiglottis.

In low grade malignancy, confined to the anterior two-thirds of the cord without fixation of the cord, laryngofissure seems to be the operation of choice; whereas, a tumor of like size and in a similar situation, but of high malignancy, would require a more extensive operation. When the growth extends into the posterior third of the cord, recurrence is much more frequent because of the probability of extension by way of the lymphatics.

The papilloma-like malignant growths are often very misleading for the reason that they appear simple to remove by endolaryngeal means, and the growths are generally found to be more extensive when examined by direct laryngoscopy than when viewed in the laryngeal mirror; and, too, it is impossible to tell beforehand how far the cancer cells may have penetrated into the surrounding tissues. The more superficial the growth, the more it is confined to the anterior or middle third of the cord; and the more freely the cord moves, the better the chances are for a cure by means of an operation. If the mobility of the cord is impaired, it shows that the surrounding tissues have become invaded and a more radical procedure is necessary. But, when the growth is limited to the anterior intrinsic area, if it is superficial and the cord freely movable, laryngofissure will prevent recurrence of the disease in about 80 per cent of cases. When the growth has spread to the cord of the opposite side and the anterior commissure, or, if it is spread to the surface of the arytenoids but is still confined within the larynx, total laryngectomy is the operation of choice. Of course, the greater the extent of the growth, the poorer does the prognosis become. If the disease has spread beyond

the confines of the larynx as evidenced by the presence of perichondritis and invasion of the glands of the neck, operation of any kind is useless, and the condition is a hopeless one. In these cases, palliative measures such as radium and deep x-ray therapy are indicated.

In some cases in which it is difficult to determine whether or not a conservative operation should be performed, New advocates the two stage operation, the first stage consisting of tracheotomy, the second stage consisting of thyrotomy supplemented by diathermy or, if indicated, laryngectomy may be performed in the second stage.

Radium and roentgen rays are used as palliative measures in inoperable carcinomas of the larynx. They are also used in conjunction with operative procedure in those cases of operable cancer in which the cervical glands are found to be involved at the time of operation. In operable carcinomas of high malignancy in which there is no cervical involvement, irradiation of the cervical region is advocated both before and after laryngectomy.

In summarizing, the type of operation is determined by the location, degree of malignancy, amount of fixation, extent of involvement of the surrounding tissues, and the general condition of the patient.

## RESULTS

Statistics on operative mortality and operative cures vary considerably, but on the whole are much more encouraging than they were several years ago. MacKenty<sup>3</sup> reported recurrences in incipient cancer of the larynx in three per cent of the patients after laryngectomy, and in 35 per cent after thyrotomy, which experience he states is an argument for early diagnosis and radical treatment. The percentage of recurrences in the more advanced cases are, of course, much higher, 25 per cent representing recurrences in intrinsic, moderately advanced carcinoma; 35 per cent in border line cases; and almost 100 per cent in extrinsic cancer. In the light of Jackson's earlier attitude toward laryngectomy as expressed by him in the symposium in Paris in 1922,<sup>8</sup> the following comments<sup>9</sup> are of interest and importance: "The rather pessimistic views expressed \* \* \* apply now only to cases of malignancy, with extension to the lymphnodes. If there is no obvious glandular involvement, laryngectomy is justifiable and gives a percentage of freedom from recurrence that is well worth while \* \* \*. We have been doing a great many laryngectomies here by the Babcock technique and the results have been excellent; but, of course, the after results are in no way to be compared with the results following laryngofissure, provided the latter operation is limited very strictly to the class of case for which it is intended." Jackson gives 85 per cent cures following laryngectomy in selected cases, and 83 per cent cures from laryngofissures. New<sup>11</sup> reports the following statistics on five year cures: excluding operative

deaths and the patients who died of other diseases, there were 84.5 per cent five-year cures following thyrotomy, 54.5 per cent cures following laryngectomy, and among the total number of cases operated upon for cancer of the larynx, there were 65 per cent five-year cures.

#### CASE REPORTS

CASE I. Mr. W. F. M., age fifty-eight, complained of hoarseness for three months prior to consultation. Hoarseness had become progressively worse until he could not speak above a whisper. There had been no pain and no difficulty in respiration, except on exertion. His general health was good. On mirror examination, the vocal cords and the false cords appeared to be slightly swollen and a little edematous. Just above the left vocal cord could be seen a small, reddish, papilloma-like tumor growing out from the lateral wall in about the middle third. There seemed to be more or less induration of tissue about the laryngeal cartilage. A week later a biopsy was performed and the histologic report of Dr. B. W. Rhamy was "squamous cell carcinoma." The patient was referred to Dr. Gordon B. New of the Mayo Clinic for further attention. A direct examination showed the growth on the entire left side of the larynx, extending to the anterior commissure. Dr. New reported the following diagnosis by Dr. Broder on the section which the patient took with him: "Squamous cell epithelioma, graded two on a basis of four." A two-stage operation was performed, consisting of a preliminary tracheotomy followed later by a total laryngectomy. Recovery was prompt and uneventful. The operation was performed too recently (January 13, 1933) to be of any value in regard to recurrence.

CASE II. Mr. R. L., aged sixty-six, complained that he had been hoarse for the eight months preceding consultation, and that he had been getting progressively worse; he also had had a little difficulty in swallowing. He had become much worse in the few days preceding consultation. He had been treated for chronic pharyngitis, laryngitis, etc. Mirror examination showed a marked thickening of the tip of the epiglottis in front and on the left, and also a nodular growth from the posterior wall. Direct examination showed an infiltration of the front and left side of the epiglottis with a nodular growth on the posterior laryngeal wall extending from there to the left laryngeal wall and also involving the posterior portion of the pharynx. The growth bled easily and the biopsy proved it to be epithelioma. Because of the great extension of the growth through the lymphatics, no treatment was given. The patient died five months later from a severe hemorrhage from the throat.

#### CONCLUSIONS

1. Chronic hoarseness should be regarded as a warning signal of possible malignancy of the larynx.

2. Every patient with a chronic, persistent and progressive hoarseness should be given the benefit of a thorough examination by a competent observer.

3. Direct examination is the only method whereby the whole of the interior of the larynx, the subglottic region and the hypopharynx can be satisfactorily explored.

4. Early intrinsic cancer of the larynx is always unilateral and usually occurs in the anterior two-thirds.

5. The degree of malignancy is of as much importance as the type of tumor with which we have to deal, not only in determining the type of treatment, but also the prognosis.

6. The earlier the diagnosis is made, the more chance the patient has for complete cure.

7. The education of the layman as to the possible dangers of chronic hoarseness occurring particularly in persons in the middle and later years of life is of the utmost importance.

8. Direct laryngoscopy is the best method for removal of a section for biopsy. An attempt should be made to include a portion of normal tissue in the section.

9. The most spectacular results are obtained in those cases in which a diagnosis has been made sufficiently early to permit of operation by laryngofissure.

10. Roentgen rays and radium are valuable as palliative measures in inoperable cancers of the larynx with cervical involvement and in conjunction with surgical measures in inoperable carcinomas of high malignancy but with no cervical involvement.

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## DISCUSSION

J. V. CASSADY, M.D. (South Bend)—The importance of early diagnosis of carcinoma of the larynx is represented by these two cases that Dr. Bulson presents. It is probable that the extrinsic carcinoma if recognized early would have been intrinsic or at least operable. We as specialists are much to blame for this failure to recognize these cases early, because we don't examine the larynx carefully as a routine procedure, and if difficult to see even in those cases of hoarseness cannot always be sure that a growth is not present. Although endoscopic examination is important, generally a careful laryngeal mirror examination is more important in the early diagnosis of these cases. We as laryngologists should not be satisfied without accurate visualization of the larynx to determine the presence of a lesion, especially in the anterior commissure, and the general practitioner should be reminded that the chronic hoarseness cases they see may be carcinoma. Tuberculosis of the larynx is more frequent than a few years ago and is recognized earlier. Carcinoma is relatively rare in most of our practices, probably because we have not been as alert to study the larynx as we should be or most of these cases go to larger medical centers. We can do much to educate the physicians of a community and the public as well that hoarseness which persists for several weeks or months is not just catarrh, but is a signal which should be regarded as dangerous as a nodule in the breast which most people recognize as a potential cancer.

In the direct examination of the larynx, it is usually very surprising to see how much deeper the cancer extends than it appears by minor examination. One case I had which appeared limited to the anterior commissure and the anterior third of a ventricular band extended an inch or more below the cords and to the opposite side below. Another well localized lesion of the sinus Morgagni extended past the midline on direct examination.

We often hesitate in doubtful cases to do an endoscopic examination or suggest it. I recall a case that came to me from Dr. Salinger in Chicago that I treated for a year or more with a diagnosis of atrophic laryngitis that since then has died of an intercurrent infection that I am not sure was not carcinoma. I did not do an endoscopic examination because a peer had made the diagnosis and I hesitated to question it. For exact information and biopsy, to me, endoscopy is essential, but in the hands of many, laryngeal mirror examination is sufficient. Surgery is more satisfactory than radium or x-ray treatment in this condition, and laryngofissure gives such good results in early cases, it is to be hoped that the next generation will see laryngectomy replaced by laryngofissure, the diagnosis being made early enough to justify this as a complete operation. To make this possible, a careful, accurate view of the larynx is necessary in every case of persistent hoarseness. We shoulder the

responsibility, and if we are content to make an effort to see the larynx, which is often difficult, don't see it, presume it is not necessary, diagnose catarrhal laryngitis when carcinoma should be diagnosed, we can never pass the blame to others than ourselves for the failure of laryngofissure to cure all of the patients. Cancer is a painless disease. Extrinsic cancer does not give evidence of its presence until far advanced, because hoarseness does not occur. Careful routine examination of the larynx in every case would discover these conditions in their incipency. Endoscopy should supplement it if necessary.

D. O. KEARBY, M.D. (Indianapolis)—It seems to me that the most important thing in the discussion is to emphasize our responsibility as laryngologists. Dr. Bulson has gone into detail and read a classic paper, covering the subject ably in all of its phases.

We should not expect the general practitioner to know about the larynx, because he cannot see it. We who are well trained cannot see with a mirror into the larynx of all people. Hoarseness might be caused by any one of thirty or forty conditions. Three things produce chronic hoarseness: cancer, tuberculosis, and syphilis. They are the big things. Our responsibility is to teach men who are seeing patients who are hoarse, to give us the privilege of looking into the larynx. With this information and history we can begin a systematic inquiry as to what the cause may be, whether it is cancer, tuberculosis, syphilis, papilloma, tuberculosis granuloma, etc. We must satisfy ourselves as to what the diagnosis is. The greatest difficulty will probably be in differentiating syphilis and carcinoma.

I thoroughly believe in biopsy. I do not believe that it is dangerous to the patient through causing cancer to spread rapidly, as is thought. Dr. Bulson gives Dr. New's statistics. However, they do not prove the point.

Dr. Clerf at Jefferson thinks that biopsy does no particular harm. Any patient that does have biopsy done, and it proves to be cancer, must be operated soon if any good is to be done. Left unoperated, biopsy or no biopsy, the cancer destroys the patient. If by examinations and biopsy early cancer can be recognized, laryngofissures will supersede laryngectomy.

I have slides to bring out the point of peroral endoscopy over that of direct mirror examination. Embarrassment is frequent because friends who refer cases think that the laryngologist can see every larynx by the indirect method with the mirror. They must be taught that it is impossible to see all types of larynx by the indirect method. This slide shows a normal larynx that can be seen by indirect or mirror method. The epiglottis stands up. This slide shows the dependent epiglottis, which obstructs a view of the anterior commissure where cancer is always found. The direct method through the laryngoscope gives you an entirely different view. Lifting the epiglottis with the lip of the laryngoscope, one will see this picture (slides)

of false cords first, then the view of the true cords when the patient inspires. The direct method, until you get accustomed to it, does not present the view that is easy to see by the indirect method, in every case.

I have put on these slides to bring out and emphasize the point that we have types of epiglottitis in which it is absolutely necessary to use direct laryngoscopy in order to see the larynx. I want to make a few comments relative to biopsy of syphilis versus carcinoma of the larynx. In all cases with hoarseness we must eliminate tuberculosis and syphilis and we must determine whether it is carcinoma. We figure tuberculosis secondary to a chest involvement; we do a Wassermann to see whether it is syphilis or not; then we do biopsy. I recommend biopsy; however, it may fool us. I have two cases, living and well, in which good pathologists have made diagnoses of carcinoma of larynx. Both patients, one male and one female, refused any type of operation, and upon potassium iodide and mixed treatment have gotten entirely well. It is rather embarrassing to tell a patient that he will die, then have him get perfectly well. Therefore, in any case, I always use therapeutic tests and put them on anti-syphilitic treatment. Though cancer is destructive, sufficient time should be taken to administer a course of anti-syphilitic treatment.

I like what Dr. Bulson said in his paper about getting a competent observer on these cases. I don't know whether we are competent or not. Carcinoma of the larynx is such a tragic thing. As an illustration, I observed a late case about four weeks ago, in which the direct method was used, specimen taken, and forty-eight hours later the pathologist said it was carcinoma. The question was whether or not it was operable. I thought I was not competent to pass on that. It has been my custom, and it will continue to be my custom, to refer such cases to more competent observers. This man was sent to Dr. New at Rochester, the diagnosis of carcinoma was verified and operation was performed.

The ideal to be approached is early diagnosis; laryngofissure, the operation desired. Deformity, loss of voice and mortality will be lessened. This idealism can be approached only in case patients with hoarseness are privileged to be seen early by competent laryngologists.

JOHN F. BARNHILL, M. D. (Indianapolis)—This paper is timely, plain, and covers the subject well. Of course, the writer could not cover all the field, and I shall mention only such points as he found necessary to omit. Some years ago a writer said that in the diagnosis of cancer of the larynx nobody could be certain in the first stage, but that in the second stage any good laryngologist could be certain, and that in the final stage any fool could make a diagnosis. There has been much progress since the above was written, so that now a well trained laryngologist may make a correct diagnosis

in any stage, and usually even in the first. A diagnosis at this period is important, since when recognized thus early and removed, as may now safely be done, cure is almost certain, for it is a clinical fact that early cancer of a vocal cord is a hopeful affection. The present view of cancer is that in the beginning the affection is local and that its removal from a vocal band at this time is as safe and certain as the removal of an ingrowing toenail.

I would wish to emphasize the desirability of operating on cancer of the larynx at a period when laryngofissure is the proper procedure. I mean, of course, early cases when the malignancy is intrinsic. Operation at this period assures the patient a useful, even if impaired, voice, and the results as to return of the growth are very satisfactory.

It is most unfortunate to permit cancer of the larynx to progress to a degree when nothing short of complete removal of the larynx will be worth while. This operation can now be done with remarkable safety, and patients often live months or years afterward. I am aware that certain operators say that such patients are remarkably happy, that they go about their tasks, whatever they have been, and that they develop a kind of speech that satisfies them. To some extent these assertions are true, but the fact remains that few are really able to speak so that they may be generally understood, and that few enjoy life abundantly after losing the larynx. Every adult whose hoarseness continues over several weeks should be subjected to the most rigid examination by a laryngologist. Haste in diagnosis is not necessary. Examinations should be repeated, and every known means employed; when malignancy of the cord is determined laryngofissure should be done. The period of metastasis should not be awaited, and laryngectomy should become more and more an obsolete procedure.

BERNARD RAVDIN, M. D. (Evansville)—I have enjoyed this paper and there is nothing that I can add except to emphasize things that have been said. I think we, as otolaryngologists, should take it upon ourselves to avail ourselves of every opportunity to talk to general practitioners concerning the relative importance of hoarseness. You hear general surgeons talk of cancer of the breast, cancer of the stomach, cancer of the uterus, etc., and of the importance of early diagnosis, and of curing cancer of the breast before the tumor has become a cancer. I think we should be crusaders in the field of carcinoma of the larynx by insisting that otolaryngologists be permitted to see these cases often and early. I recall a case of a lady, years ago, who became an enthusiast of horse racing. She visited the track every day for a twenty-four-day meet, and shortly after became very hoarse. Prior to this she had never complained of hoarseness. She was treated by her family physician for four months with argyrol sprays, etc., in the larynx.



When I had occasion to see her, she had a well developed mass on the anterior two-thirds of the left vocal cord. The tumor looked suspicious; I did not make a biopsy, since she was contemplating an eastern trip, suggested that she see Dr. Tucker of Philadelphia. Dr. Tucker examined her, made a biopsy, but the pathologist's report was questionable. He removed the mass by direct laryngoscopy and asked that I observe her at frequent intervals. Within the next six months there was extensive recurrence. She returned to Philadelphia for laryngofissure and there has been no recurrence in five years.

I think a great point for emphasis is early diagnosis of these cases. Last year at the American College of Surgeons in St. Louis, a series of cases of carcinoma of the larynx were shown by Dr. Dean and he felt that they were doing much better work by recognizing carcinoma of the larynx early and operating them much earlier than they had in the past, thus preventing extensive cancer where they felt it was sure to develop.

E. L. BULSON, M. D. (closing)—All of the speakers have mentioned the early diagnosis as being most important in cases of cancer of the larynx. Performing a biopsy, I believe, is one of the most important things of all. In many of these cases it is impossible to be absolutely certain of the type of lesion with which we are dealing without making biopsies.

The points that Dr. Barnhill brought out in regard to the rapidity of growth were extremely good. Ordinarily, cancer of the larynx is very slow in development, so there is no excuse for late diagnosis.

Dr. Ravdin hit the nail on the head when he said that it is up to us as eye, ear, nose and throat specialists to educate the general practitioner in the importance of chronic hoarseness. The average practitioner treats such patients for laryngitis, pharyngitis, or whatnot, over a period of time, and they get no better. Sometimes they go over a period of months or years before they consult a laryngologist and frequently then it is too late to do anything of curative value; whereas, early diagnosis would have permitted proper treatment.

## ACUTE UPPER RESPIRATORY TRACT INFECTIONS\*

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If we enumerate all the extensions or complications of acute upper respiratory tract infections we will have made a fairly good index of a modern text book of medicine. We are not quite sure just what these infections are. Many different types of bacteria have been recovered from various patients, and different types of bacteria have been recovered

from the same patient at various times in the course of his disease; for instance, we frequently obtain a throat culture in the early stages of an acute infection of the beta type hemolytic streptococci, and later the predominating growth is a green producing cocci. The same thing may apply to an acute suppurative otitis media. Whether the green producing cocci is a later stage of the hemolytic streptococci or is a different bacteria entirely has not been determined. From clinical observations I am inclined to the former view.

Cultures from the nasal passages usually show a predominating staphylococcus growth. These cultures are obtained in so many instances even without evidence of an acute infection that the staphylococcus may be considered a normal habitat of the nasal passage especially of the anterior portions.

The beta type hemolytic streptococcus has assumed a role of most importance in recent years in upper respiratory tract infection. During the winter months it is probably present in the throats of more than half of the people. Felty and Hodges<sup>1</sup> report finding this organism in almost pure cultures in 100 per cent of their cases (40) of acute throat infection. They believe all cases of acute infections of the pharyngeal lymphoid tissue are due to this organism. They further state the disease itself should be fixed on a firm etiological basis with a definite entity. With this view I wholeheartedly subscribe. Felty and Hodges, Bloomfield<sup>2</sup> and others believe the green producing cocci and Gram-negative cocci are the normal flora of the throat. Pilot and Davis<sup>3</sup> recovered hemolytic streptococcus from surface swabs of the tonsils in 49 per cent of their cases. They recovered this organism from the crypts of the same tonsils in 59 per cent of the cases. From the crypts of the same tonsils after removal they obtained a positive culture in 92 per cent of the cases. This is about the percentage found by Pilot and Pearlman in a similar study. Bloomfield and Felty<sup>4</sup> found 41 per cent of 200 healthy women carriers of the beta hemolytic streptococcus. They found such carriage was based on focal tonsillar infection. Smillie<sup>5</sup> found that certain persons may harbor this organism in the throat for three or four months after an attack of the disease. This would explain the frequent recurrence of head colds and sore throats in many children and some adults following an initial throat infection, particularly during the winter months. In tonsillectomized throats this organism is recovered in about 16 per cent of the cases.

Acute rhinitis or the common head cold is one of the most common maladies encountered during the colder months of the year. Just what position does this affliction assume in the general classification of acute upper respiratory tract infections? Is it a separate clinical entity with its own bacterial causative agent, or is it the same as so-called influenza or la grippe with its accompanying fever and prostration? The more I see of these various

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infections, most of them beginning as an afebrile head cold or sore throat, the more I am inclined to believe they are all the same infection, differing only in severity or in their clinical manifestation. I am unable to pick out those head colds or red throats which will remain a head cold or sore throat and those which proceed to develop a temperature with the various symptoms of an influenza or la grippe. If this view is correct, colds may be considered as the first and frequently the only stage of an influenza or la grippe or that the latter is a later stage of a cold.

The work of Dochez and his co-workers indicates that a symbiosis exists between a filterable virus and the known pathogenic bacteria of the nose and throat in the production of colds and possibly influenza.

Those cases that develop a temperature usually clear up after a few days with no trouble further than a slight tickling cough. A few cases are not so fortunate, as a direct extension of the infection by contiguous tissue may occur. This direct extension may be to the nasal sinuses, the ears, or downward to the bronchial tubes and lungs, or the infection may extend to the cellular tissue of the floor of the mouth or neck. Even the bones of the skull may be involved by direct extension.

The infection may be extended by way of the lymphatics to the cervical or pharyngeal lymph nodes or even to the mediastinum.

Infection may be transmitted by way of the alimentary tract to the appendix and other abdominal structures or organs. However, this mode of transmission is not so important as the gastric and intestinal juices seem to destroy the hemolytic streptococci rapidly. Davis found the organisms dead in from three to five minutes when placed in the stomachs of rabbits.

In recent years, a fourth class of complication has received an ever increasing recognition. I refer to a bacteremia or a blood borne infection from the upper respiratory tract mucous membrane. I believe a transitory or an evanescent type of bacteremia is fairly common and occurs much more frequently than is popularly supposed. This bacteremia as a rule does not produce distant foci of infection or discernible involvement of other organs as is implied in the older term of "septicemia."

The symptoms presented by these patients are a sense of malaise which is rather marked and out of proportion to the appearance of the throat. Chilliness and fever is present, usually rather high, especially in children. The temperature, if no further involvement ensues, usually lasts several days. The back and legs may ache but frequently the aching is absent. Occasionally a slight nausea and vomiting are present. A slight tickling cough with negative lung findings is usually found. The face is flushed and frequently an erythema or rash is observed over the chest. A mild or marked conjunctivitis is present in almost 100 per cent of the

cases during the acute stages. The throat and tonsils, if present, are red and inflamed. Occasionally the tonsils are spotted but more frequently are only diffusely reddened similar to the pharynx. The uvula is edematous and hyperemic. The tongue is coated and the breath fetid. A moderate leukocytosis is usual, persisting four to eight days after the temperature has become normal.

The patient is usually bright eyed and alert. There is no clouding of the intellect, even with a high temperature. Delirium is absent as a rule. The temperature normally has a fall and a rise during the twenty-four hours. The patient feels fairly comfortable. One is frequently surprised to find such a high temperature with no abnormalities found other than an apparently mild red throat.

The above is a typical description of an uncomplicated influenza or la grippe. From a clinical standpoint a mild bacteremia is the most satisfactory explanation of the syndrome. This bacteremia, if present, is difficult to demonstrate by means of blood cultures. The difficulties encountered may be:

1. The bacteria are not present in the quantity of blood withdrawn.
2. The showers of bacteria may not be present in the blood at the time the cultures were taken.
3. Improper technic or the wrong culture media may be used. The hemolytic streptococcus is difficult to grow.
4. The filtration system of the blood stream, that is, the lungs and finer capillaries, may remove most or all of the bacteria before they reach the arm or neck vein, where cultures are usually taken.

In an effort to determine how frequently this apparent bacteremia could be demonstrated, Miss Werner, Dr. Rubin and I in 1930 at the Children's Memorial Hospital in Chicago made 131 blood cultures from 63 children in various stages of acute or subacute throat infections. A positive blood culture was obtained in about six per cent of the cases. If cultures had been taken from an artery, such as the carotid, the percentage of positive cultures probably would have been greater. Ottenberg describes such a method.

I recently reported before the Chicago Laryngological and Otological Society<sup>a</sup> a striking example of an overwhelming bacteremia from an acute throat infection. In this case G. S., boy, 8 years of age, had a mild red throat, cervical adenitis and a red ear drum with a moderate febrile reaction. He did not improve but steadily grew worse. Positive cultures of hemolytic streptococci were obtained from his throat and blood stream. Death occurred in about 10 days. Autopsy revealed a marked bacteremia with numerous small abscesses throughout his body especially his lungs and brain. Even his eyeballs had numerous small abscesses. No portal of entrance of the infection into the blood stream could be determined.

We are all familiar with the increased incidence of appendicitis following epidemics of sore throat.



Many of these have been proved to have the infection transmitted from the throat to the lymphoid tissue of the appendix by way of the blood stream. This is also true of the peritoneum. In these peritoneal cases the hemolytic streptococci have been recovered from the throat, the peritoneum and the blood stream with no intraperitoneal lesion. Such cases have been reported by Kunzler,<sup>9</sup> Chapelle,<sup>10</sup> Ranshoff and Greenebaum,<sup>11</sup> MacLennan and McNee,<sup>12</sup> and others. There is no doubt that acute peritonitis as well as acute appendicitis may be secondary to an epidemic of acute throat infections. Chapelle<sup>10</sup> reports such an epidemic in children during an epidemic of sore throat. He recovered the organism from the throat, the blood stream and the peritoneum.

Many acute infections of the kidney, heart, brain and other organs or structures of the body occurring during an acute upper respiratory tract infection can be explained only by a blood stream transmission of the infection.

Admitting that a majority of acute throat infections are due to the hemolytic streptococcus; also admitting that a bacteremia from these infections is a possibility or even a probability, what deductions can be made?

1. The most effective local treatment obviously is given during the early stage of the nose and throat involvement before the infection has involved the deeper structures of the mucous membrane or before the more remote portion of the respiratory tract is involved. This treatment, to be most successful, should cover, if possible, all the involved area, that is, the nose, naso-pharynx, pharynx, larynx and sometimes the trachea or the conjunctiva; in brief as much of the upper respiratory tract as can be reached.

2. With this apparent tendency of the hemolytic streptococci to invade the blood stream or to extend to the nearby regions, it is obvious that throat and nose operations should be deferred until a quiescent period has been reached. Many operations have been made and can be made on the various structures in the nose and throat during the acute stage of an infection without trouble, other than a stormier convalescence, than they would otherwise have had. However, if a sufficient number are done the percentage of complications to the nearby structures or to the remote regions of the body, will be increased. Bleeding from a throat four or five days after a tonsillectomy is frequently from this cause. Other unsatisfactory results following a tonsillectomy may be attributed, in many instances, to this cause particularly following a general anesthetic. These after effects may be sinusitis, otitis media, the various pulmonary and chest involvements, adenitis, cellulitis, etc. Undoubtedly the blood stream would be more easily invaded under these conditions with the possibility of more distant complications.

3. With an extension of the infection to the middle ear, the question would arise whether the

tympanic membrane should be incised as soon as bulging is detected. I believe this should be done as the risks of a further involvement of the ear structure seem to be less if the ear drum is opened as soon as the bulging occurs than if delay is practiced. However, from clinical grounds, I am led to believe that opening an ear drum, particularly during the stage of blisters on the tympanic membrane that we frequently see with a hemolytic streptococcus infection, produces a temporary bacteremia. This would most easily explain the rather sudden increase in temperature that frequently takes place during the 24 to 48 hours following an early incision. This bacteremia, if present, has no apparent ill effect in the vast majority of cases. In the exceptional instance, it may.

This spring I saw a child, B. G., 8 years of age, daughter of a physician, who had measles. One week later she developed an earache. When I examined her, I found a red bulging ear drum with two or three serous filled blisters. The ear drum was incised with a free bloody discharge. The opposite ear drum was pink but with no displacement. That night about 11 o'clock I saw her again and found the second ear drum red, bulging and also with blisters. This drum was also incised with a profuse bloody discharge. She did not improve, but steadily grew worse. Her temperature reached 105° F. by mouth each day with but slight remissions. A very profuse muco-purulent discharge from her nose was present throughout. She complained of no pain but gradually grew semi-comatose from which she could be aroused. Evidence of meningeal involvement was absent. She died on the eleventh day following the incision of the first ear drum. Autopsy revealed an overwhelming septicemia with multiple small abscesses throughout her body. She also had a pan-sinusitis and a bilateral mastoiditis. The central nervous system was uninvolved. The entrance of the infection into the blood stream could not be determined. It is possible, in this instance, that the incisions of the ear drums combined with a very virulent infection was sufficient to produce the blood stream infection. It is also possible that entrance was obtained from the mucous membrane of the sinuses, the mastoid, or the throat.

4. If mastoiditis has developed and it is felt that a mastoid operation will have to be done ultimately, when is the best time to interfere? No set rule can be formulated as each case must be judged separately with a full knowledge of the anatomy, possible pathology and bacteriology of the temporal bone. If we can wait three weeks from the onset of the ear discharge with reasonable safety, I believe it is desirable to do so. By that time the mastoid cells have become partly decalcified. Nature has had a chance to throw up her protective barriers, thereby decreasing the possibility of further spread of the infection. Four weeks insure an even more uneventful convalescence.

I recently saw a boy, B. L., 6 years of age, who developed a bilateral mastoiditis. From the clinical and roentgenological aspect both mastoids were involved in about the same degree of severity. I did a simple mastoidectomy in one ear at two and one-half weeks and in the second ear at four weeks. Healing in the two ears was almost simultaneous.

If an ear persists in discharging for six weeks with reasonable care, serious consideration should be given to the advisability of a mastoidectomy as otherwise there is danger of partial deafness or of an intermittent or persistent otorrhea.

As a rule, delay in operative interference is safer in the large, bulbous, pneumatic mastoids than in the small diploic type. Apparently the large or numerous cells of the pneumatic type give room for expansion of the infection whereas the small diploic mastoids may force or lead the infection to the intracranial structures. There is one exception to the large pneumatic mastoids in which undue delay is not advisable and that is in those cases in which the cellular structure extends into the petrous portion of the temporal bone resulting, if infected, in a petrositis. Otologic literature has given considerable attention to this complication in the last two years.

The question of the treatment of these various complications is not within the province of this paper. However, I do want to outline a simple office treatment for the early stage of colds and sore throats that in my hands has given good results. If we can stop these infections in the nose and throat stage, we have accomplished much.

It is my practice in treating these colds to first spray the nasal mucosa with an aqueous solution of 3 per cent ephedrine sulphate or ephedrine hydrochloride. I do not use the ephedrine oils for two reasons: first, the oil forms a partial film over the mucous membrane which prevents the succeeding antiseptic solution from coming into contact with the mucosa, and second, the oils from a spray form a mist in the treatment room which may carry infection to the physician or to other occupants of the room.

Following the shrinking effect of the ephedrine solution, I spray the nose and throat with a 1 to 2500 solution of metaphen or 1 to 1000 solution of merthiolate. These solutions, in my experience, have the greatest antiseptic value with the least irritation. If the metaphen or merthiolate solution is introduced too suddenly or in too great quantity, there is a sharp sting for a minute or so. If a small quantity of the solution is sprayed into the nose and then after a moment is re-introduced, the smarting is greatly lessened. I always make it a point to use enough of the solution in the nose to have it drop into the naso-pharynx. The mouth, pharynx and larynx are then covered with the solution. Following the metaphen an oily preparation is snuffed or dropped into the nose and swabbed into the throat, as it seems to give the patient some comfort.

Objections to the spray have been raised as being dangerous to the ears or to the sinuses. I have not found it so in my practice. I believe the objection is largely theoretical and not based on an extensive use. These objections may be valid when the solutions are used in the form of a nasal douche by an inexperienced patient, as the solutions may be forced into the eustachian tubes or the sinuses if the patient becomes strangled or choked.

In summing up these somewhat random thoughts and more or less personal opinions, based largely on clinical observation, I believe the ordinary so-called head cold, sore throat, la grippe or influenza are all the same clinical entity, differing only in degree or extent. I believe a bacteremia is a frequent and possibly the usual accompaniment of these infections, particularly so if a temperature is present. Complications aside from those of continuity are limited only by the distribution of the blood stream.

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## INSULIN RESULTS IN MENTAL PATIENTS\*

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Only one American article, relating to the therapeutic use of insulin in patients suffering from a psychosis, has been published. Appell, Farr and Marshall,<sup>1</sup> of Philadelphia, reported their experience with thirty-three patients as to the effect on weight, physical and mental condition. They did

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not mention whether or not there were better results in some types of psychoses than in others. Hans Haack,<sup>2</sup> of Germany, gave insulin to psychotics refusing food in a different way than have the few American investigators. He gave thirty to forty units in daily single doses until the patient started to eat. Often but one dose was required. He stated success was not always permanent. Otto Jaschke,<sup>3</sup> of Germany, used insulin to best advantage in agitated patients of the manic-depressive type and in certain neuroses. He found that gradually increasing the dosage from five units twice daily to as high as fifteen units twice daily was adequate. Single high dosages he found less effective and less permanent than a gradual increase. One injection was given at ten o'clock in the morning and one at four o'clock in the afternoon.

We modeled our scheme similar to that of Appell, Farr and Marshall, since we felt that the giving of large, single, daily doses or of two doses daily so long before meals, too much endangered the patient of hypoglycemic shock.

The object of our small series of cases was to substantiate or compare results with Appell, Farr and Marshall, and to attempt to determine the difference in benefit derived by examples of the different major psychoses. The work was carried out at the Central State Hospital in Indianapolis, affiliated with the Indiana University School of Medicine.

Three cases of dementia praecox, two of the catatonic and one of the simple type, one case of involutional psychosis, and one of manic-depressive in the depressed phase, were studied. Three of the cases were eating but little and two were on actual "hunger strikes." All of them were thin and emaciated.

The physical examinations, urinalysis, and serology were negative on all patients. However, the involutional case did have arthritis deformans (marked) along with his severe emaciation. He exhibited a very chronic melancholia.

In the gastric analyses, two of the praecox cases showed an achlorhydria with no blood or lactic acid, the other praecox showed gastric retention of 400 c.c. at the end of an hour after the Ewald meal, and a hypoacidity with no blood. The manic-depressive (depressed type) had an achylia gastrica with no blood. The involutional was not tested because of refusal to co-operate.

A barium meal examination was made in each case, both before the insulin therapy was begun and after two weeks of insulin treatment. This revealed rather variable results. Case 1 (Involutional melancholia) showed marked colonic ptosis with atonic colonic stasis of descending colon before insulin but rapid emptying time of both stomach and intestines after two weeks of insulin.

The other results are as follows:

Case 2. (Dementia praecox.) Before insulin: Normal stomach emptying time; colonic ptosis;

stasis in ascending colon. After insulin: Normal stomach, with but slight colonic stasis.

Case 3. (Dementia praecox.) Before insulin: Normal stomach emptying time; marked stasis and ptosis; spastic colon. After insulin: Slight colonic stasis.

Case 4. (Dementia praecox.) Before insulin: Rapid emptying time of both stomach and colon. After insulin: Rapid emptying time of stomach but stasis of descending and rectal colon, spastic type.

Case 5. (Manic-depressive, depressed type.) Before and After: Normal stomach evacuation, but marked colonic stasis.

The insulin (U 40) was given ten units, three times daily, thirty minutes before meals, and no change made in the patient's routine. In cases 4 and 5 this dosage was increased to 15 units in the last week. A chart of the weekly variations in weight is as follows:

	At start	1st wk.	2nd wk.	3rd wk.	Insulin Disc. 4th wk.	2 mos. later
Case 1...	92	92	94	98	98	96
Case 2...	115	116	118	123	126	123
Case 3...	111	109	112	116	120	113½
Case 4...	121	118	122	124	...	145½
Case 5...	140	142	146	144	...	144¾

Thus definite increases in weight and strength were noted after four weeks of insulin therapy, but some of this was lost in the two months after discontinuing treatment. We believe that this was due to the mental states, viz.: negativism in the three praecox cases and the depressed, melancholic state in involutional and manic-depressive. The gastro-intestinal x-rays tended to show some improvement in the emptying time of the stomach and colon. However, the results were not striking. The extremely low stomach acidity in all the cases was striking and seemed to be parallel with negativism. This is to be investigated further in a larger series of cases. The mental state improved in only the manic-depressive, thus making this phase of the experiment rather discouraging.

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#### SPINAL ANESTHESIA\*

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Much has been written in recent years on the subject of spinal anesthesia or analgesia, and there seems to have arisen among surgeons two distinct schools, namely, those who vigorously oppose and condemn its use except in unusual cases, and those

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in whose hands it has proved an efficient and safe anesthetic agent for routine use, and who therefore are unstinted in their praise of it. It is the purpose of this paper to attempt, by criticism and by the presentation of a series of seven hundred consecutive cases in the writer's experience, to place on a common basis the extremists of these two schools whose arguments have too often reached the point of bitter acrimony and stubborn prejudice.

In 1899 actual intradural anesthesia with cocaine was attempted by August Bier of Bonn. Others adopted the procedure, only to discard it quickly because of the toxicity of the drug. In 1903 our first great advance was made by the discovery of *stovaine* by Fournneau. Other technical improvements have been added since that time which have reduced the disadvantages of spinal anesthesia, in comparison with other major forms of anesthesia, practically to the vanishing point. The various steps in technical improvement are interesting but they are not essential to this discussion.

#### PHYSIOLOGICAL ACTION

All drugs used in the production of spinal anesthesia act similarly, so that a description of any one of them will suffice for the many. The drug, introduced into the space between the spinal cord and its membranes or into the space occupied by the *cauda equina*, comes into intimate contact with the nerve roots and almost immediately arrests their conductive power, both for afferent and efferent impulses. The spinal cord itself is but superficially influenced, its columns continuing their functional activity during the anesthesia. The autonomic system is likewise barely influenced, if at all.

Paresthesia of the feet begins a few seconds after the injection, followed promptly by insensibility and almost complete motor paralysis. The tactile sense may not be obtunded to the same degree as that of pain. Thus, the patient may feel the knife but experience no sense of pain therefrom. Sensation is lost, however, before complete motor paralysis. It happens not infrequently that the patient, although experiencing no pain, may be able to move his toes throughout the operation, especially if the dose of drug used is not heavy or concentrated.

The duration of the analgesia depends on three factors, namely, the dosage, the amount of dilution with the spinal fluid, and the position of the patient. Of these three, the factor of dosage is most important. The time limit of the full adult dose used by us for operations below the diaphragm is about ninety minutes. The maximum amount of analgesia is attained in about twenty minutes after injection, after which the effect slowly recedes.

The abdominal muscles are completely relaxed during spinal analgesia, with consequent abolition of abdominal respiration except from the diaphragm. Diaphragmatic respiration is abolished only if the anesthetic is allowed to rise so high in

the spinal canal as to affect the phrenic center, a condition due only to carelessness or to overdosage. Through paralysis of the *rami communicantes* the intestine is released from sympathetic inhibition and tends to contract, hence the advantage of spinal anesthesia in the prevention of postoperative ileus and even in its treatment is apparent. Peristalsis is stimulated. With involvement of the upper dorsal segments nausea, usually quite transient, is experienced. Retching and vomiting occurred in about twenty per cent of our cases, but were never severe or prolonged.

Spinal analgesia affects the circulatory system rather profoundly, and in degree proportionate to the dosage. The pulse is slowed and weakened and the systolic and diastolic blood pressures fall in direct ratio to the height of the anesthetic in the cord. Using full dosage, the pulse rate may drop to 60 and the systolic blood pressure to 70 or less, their minimum points being reached in about twenty minutes after injection, whereupon they gradually rise to near normal. No other anesthetic agent produces so complete a vasomotor relaxation, but if the breathing is well maintained, even an extremely low blood pressure in the peripheral arteries may be innocuous.

Respiration is not affected in analgesia of the lumbar and lower dorsal segments, but may be profoundly influenced if those higher are involved. When the effect of a full dose is at its height the patient occasionally experiences for a brief time a sense of oppression and weight on the chest. The breathing, on the whole, is slow and rather shallow. The patient is therefore instructed from time to time to take deep inspirations. Cyanosis is an ominous sign and is indicative of affection of the phrenic or respiratory center, or both.

The skin during spinal analgesia remains of normal color or becomes slightly pale. Sweating and suffusion, as in ether anesthesia, are conspicuous by their absence. No relaxation of either the urinary or anal sphincters have occurred in our series. Uterine contractions are weakened but not abolished, and the uterus contracts promptly following delivery or curettement.

#### TECHNIC

In order to obtain best results it is necessary to obtain the patient's full confidence. A careful explanation of just what is to be done, coupled with the repeated assurance that beyond the first, slight needle puncture he shall feel no pain, is usually sufficient to calm the fears and obtain the cooperation of most patients. We frequently give a nervous patient two or three *amytal* tablets before bringing him to the operating room, with excellent results. We have avoided the preoperative dose of morphine, either alone or in any of the usual combinations, because it is not desired to further depress the circulatory system of the patient, already lowered to a certain degree by the anesthetic drug itself. When the patient is brought to the



operating room he is given a hypodermic injection of 0.05 gram (three-fourths grain) of ephedrine sulphate solution to further counteract the anticipated circulatory depression of the anesthetic.

The technic of Labat, with some modifications, is the one employed in our series. The drug used is procaine hydrochloride, which is obtained in the form of pure crystals sealed in a sterile ampule. The drug, dissolved in the patient's spinal fluid, is introduced into the subarachnoid space without the addition of any other substance.

With the patient lying on his side on the operating table the lumbar region is scrubbed, shaved and painted with tincture of iodine. An assistant stands facing the patient and instructs him as to the proper posture to assume, namely, knees drawn up, head down, and back curved as much posteriorly convex as possible, thus widening the interspinous spaces to their fullest extent.

The operator, gowned and gloved, seats himself at the patient's back and selects by touch the lumbar interspace he chooses to enter. This is usually the second, third or fourth, depending upon the height of the analgesia desired. Using a 2 cc. Luer syringe fitted with a fine gauge needle, the skin at the point selected is infiltrated with a few drops of 1 per cent procaine solution, producing a wheal. The infiltration is then carried into the deeper structures until the whole tract is anesthetized; 2 cc. of solution is amply sufficient for this purpose.

The spinal needle used by us is made of platinum-iridium, to avoid the accident of breakage. It is four inches long, of a gauge not to exceed 19 or 20, and has an accurately fitting wire obturator. The point is sharp but of short bevel and the hub is made to fit a standard Luer tip syringe. Heavy diagnostic needles are entirely unsuitable and produce too much trauma for anesthetic purposes.

The needle, grasped like a pen, is introduced slowly and steadily through the previously infiltrated tract until the resistance of the tough, interspinous ligament is encountered. Upon passing it further forward there is a sudden cessation of resistance, almost with a "pop," as the dura is pierced and the subarachnoid space is entered. Upon removal of the stylet the spinal fluid should follow, drop by drop. If, during the introduction of the needle, bony resistance should be encountered, the needle is entirely withdrawn and reintroduced at a slightly different angle. Rarely a new site is selected and infiltrated, but with increasing practice and facility this necessity becomes more and more infrequent.

The escaping spinal fluid is caught in a dry, sterile medicine glass or small graduate into which has been poured the crystals of procaine, the glass being agitated meanwhile to facilitate the solution; 3 cc. of fluid are usually withdrawn, after which the solution is sucked up into a 5 cc. Luer syringe.

The anesthetic solution is now gradually introduced through the spinal needle, which has been

left in situ. Usually 1.5 cc. are introduced, then the plunger is withdrawn to the 3 cc. mark again. Now all the solution is injected and the plunger withdrawn to the 2 cc. mark, then finally reinjection is completed and the needle withdrawn. A small square of adhesive is placed over the puncture in the skin. It sometimes happens that no spinal fluid can be withdrawn from the canal by suction. This is because a portion of membrane or a root of the cauda equina is sucked against the point of the needle, obstructing it when negative pressure is made. Rotation of the needle, with care neither to withdraw nor force it deeper, often corrects this condition.

The patient is now carefully rolled onto his back, after being cautioned on no account to raise his head. For high abdominal operations he is placed for five minutes in a slight Trendelenburg position; for operations involving the lower abdomen the horizontal posture is sufficient. By the time the patient is prepared and draped anesthesia should be complete. However, the surgeon should always test the pain sense at the incision site before commencing the operation.

The most important person engaged in the ritual of a surgical operation, next to the patient himself, is the anesthetist, and he is more necessary and should be more skillful if he is attending a patient under spinal anesthesia than if he is actually engaged in pouring ether on a mask. He watches the patient's pulse and frequently takes his blood-pressure, but most of all he talks to him and encourages him to talk, thus taking his mind off himself and his physical troubles. Someone has called him a "psychic anesthetist," a term that well describes the major portion of his duties.

The dosages used in our work are approximately as follows: for stomach, gall-bladder and other high abdominal operations, 200 to 250 mg.; for lower abdominal and gynecologic operations, 150 mg.; for perineal, anal, and most hernia operations, 100 mg.; for operations on the lower extremities, 100 to 150 mg. These admit of some variation according to age, weight and so forth. In our earlier cases we gave a few doses of 300 mg., but since some of the reactions were unpleasant, not to say dangerous, we now seldom use more than 200 mg.

#### ADVANTAGES AND INDICATIONS

It should be stated at the outset of this section of our thesis that the so-called bad risk patient is still a bad risk, no matter what type of anesthetic is used. Too often we hear of spinal anesthesia being reserved for such cases only, the result being that the surgeon accumulates for himself an unenviable mortality rate which he is sometimes prone to lay at the door of the anesthetic. It is only fair, in comparing spinal analgesia with other major anesthetics, to do so on a basis of similarity of cases and of approximately equal skill in the technic of the professors.

Roberts, Woodward and Coakley<sup>1</sup> find that the

chief advantage of spinal anesthesia in their hands has been the extreme relaxation obtained. This is especially valuable in difficult cholecystectomies, hysterectomies, prostatectomies and the like, and permits of smaller incisions and greater speed. Jones,<sup>2</sup> in a series of one thousand cases, especially emphasizes its advantages in gall-bladder work. In conditions such as perforated peptic ulcer, when the abdomen becomes board-like and can hardly be relaxed by any inhalation anesthetic, spinal analgesia is certainly indicated. Wright,<sup>3</sup> after an extensive experience, considers spinal anesthesia "a real life saver" in operations entailing much shock and in intestinal obstruction. He says, "It is preferred by the patient in many cases, and in none more than that of the patient writhing with the pain of a duodenal perforation. He never forgets the surgeon who stopped his pain in thirty seconds."

In contrast to ether inhalation anesthesia, spinal block may be used with safety on patients with respiratory disease, nephritis, diabetes, or in confirmed alcoholics. From the patient's view point we have the following concrete evidence from our own series of seven hundred cases; 112 of this number had previously undergone some sort of surgery under ether. With two exceptions all stated that if operated again they would choose spinal analgesia.

In considering safety in the average, unselected case, so far as spinal anesthesia is concerned, there seems to be no question, from the literature at our disposal, that it surpasses inhalation ether. Forgue and Basset,<sup>4</sup> in a compilation of 222,647 cases operated under spinal anesthesia, find that the mortality attributed to the anesthesia is 0.06 to 0.08 per cent with all technics. Forgue himself has operated on 4,500 cases without a death caused by the anesthesia. Philipowicz<sup>5</sup> reports 5,000 cases with two deaths, while Deaver and Eckels<sup>6</sup> report 2,302 cases with two deaths, one from operative shock in a patient almost moribund. Deaths from ether have been variously given as 1 in 15,000 to 1 in 500; from spinal anesthesia, by all methods and technics, from 1 in 17,000 to 1 in 50. Marbury<sup>7</sup> states that deaths from spinal anesthesia occur during the first twenty minutes after its administration, whereas deaths due to ether may occur days afterwards, from pneumonia, shock or embolism, and that these are not usually counted in computing mortality rates. In our own series we had no deaths that could, even remotely, be ascribed to the anesthetic. From accumulated evidence, then, and in fairness to the adherents of inhalation anesthesia, we conclude that for operations below the diaphragm spinal anesthesia is as safe, if not safer, than ether.

#### CONTRAINDICATIONS

It is considered inadvisable, in the present state of our knowledge, to use spinal anesthesia for operations above the diaphragm. There are few other contraindications. Babcock,<sup>8</sup> who has operated upon 6,000 cases without a death, states that obese

patients with a short, thick chest and limited breathing apparatus are less suited for the method than subjects with ample breathing space.

Marked hypotension is considered by some as a contraindication. We have found, on the other hand, that elderly patients with hypertension react rather badly. The sudden drop in pressure from above 200 systolic to 100 or less, frequently makes them feel badly. We use it, therefore, in these cases with caution.

Finally, spinal anesthesia should not be employed by those who have not developed a trustworthy technic, or have not carefully mastered the physiology of the method, including an understanding of the dosage and mode of diffusion of the drug.

#### RESUMÉ OF CASES

Six hundred and twenty-two of the cases in this series were operated in the Marine Hospital at Port Townsend, Washington, by the writer or his fellow medical officers of the U. S. Public Health Service. The others have occurred in private practice. In the first group we were perhaps fortunate in having for patients hardy sailors, for the most part young and with little tendency to nervousness. In this group, too, most of the cases were of an elective and non-emergency nature. The other group included all sorts of cases, as met in routine surgical practice.

There were five deaths in the series, but all took place three days or later following operation. Therefore, we do not feel that these are in any way attributable to the anesthetic. Permanent morbidity from nerve trauma was never observed.

Slight nausea and vomiting were present in 20 per cent of our cases and were never persistent beyond a few minutes. This is in marked contrast to ether patients. Eighteen per cent of cases complained of headache within 72 hours of operation, as compared with 50 per cent following ether. Backache and leg ache were present in 15 per cent, as against 60 per cent of ether cases. Some of the backaches may have been from postural causes.

The average duration of incisional pain after spinal anesthesia was 29 hours; after ether, 48 hours. Thus it is unnecessary to use morphine so freely. Patients may be given liquids and food sooner following operation under spinal anesthesia. It was not found necessary to catheterize our patients any more frequently than after general anesthesia.

In three cases of our series the operations were so unexpectedly prolonged that it became necessary to use ether inhalation to finish them. In one case we were unable to get into the spinal canal on account of a kyphoscoliosis and in another we had a dry tap on account of a spinal block.

In conclusion I wish again to quote from Babcock: "The effect of the few centigrams of drug used upon the parenchymatous cells of the body is inconspicuous. The brain, liver, kidneys, lungs are practically free from toxic action due to the anesthetic. In no other known way can so profound



and extensive an anesthesia be produced by so small a dose of a drug and with so little general toxicity. With no other method does the depressing action of the drug appear in the early stage of the operation when the patient can best withstand it. When properly employed, no other anesthetic of equal range leaves so few sequelae."

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## DISCUSSION

FRANK B. RAMSEY, M. D., Indianapolis: There is probably no form of anesthesia which has been introduced to the medical profession which has been the subject of so much difference of opinion and usually of so much argument as has spinal anesthesia. It has at different times been very popular and used in large series of cases. Some of the series published have comprised several thousand cases without any deaths or serious complications, and, on the other hand, some show a death rate as high as 1 per cent, or higher.

Dr. Sexton has stated that most of his patients were healthy young adults and I think that accounts for the fact that he is able to report few complications and no deaths, particularly on the table.

The trend is toward the opinion that spinal anesthesia is a good anesthetic for good risk patients, and a particularly bad anesthetic for bad risks. I remember that when it was first used it was employed many times in cases where everyone was afraid to give any other type of anesthetic. Consequently, it was in the poor risks that we got poor results.

There have been many series of spinal anesthetics reported with regard to pulmonary complications, and it is true that spinal anesthesia is followed by as high a percentage of pulmonary complications as any other type. Sometimes the percentage is higher and the bad results are probably due to the fact that spinal anesthesia is usually used when pulmonary pathology is present before the operation.

The advantages of spinal anesthesia in bad risk cases are not related to the prevention of pulmo-

nary complications in comparison with any other type of anesthetic. The advantages can be almost entirely limited to the comfort of the patient and of the surgeon, and the high degree of relaxation, which is a very great advantage, particularly in difficult surgery. The original work on spinal anesthesia was slowed up because toward the end of the surgical work the patient would begin to revive and ether would be given to finish the work. For this reason it is now limited almost entirely to low operations and also to those which do not take a great deal of time. It is distinctly a disadvantage to have a patient under spinal anesthesia come out during the closing of the abdomen, that being the time when we need much relaxation. At the time of the conclusion of the operation the patient is liable to have more shock from the operative work itself, and to have a general anesthetic superimposed upon a spinal anesthetic is particularly apt to increase the shock.

Dr. Sexton brought up one point with which I agree heartily, and that is that spinal anesthesia is best and safest in the hands of a man who uses it often, as it takes a great deal of experience to use it. Also in a hospital where there is good anesthesia and where you have good risk patients, and where the patients have become accustomed to its use, there should be no fear on the part of the patient with regard to its use and the risk will be thereby very much lessened.

C. N. COMBS, M. D., Terre Haute: I take it that Dr. Sexton does not advocate the use of spinal anesthesia as a routine anesthetic, if, indeed, "routine" is a word that should ever be used in connection with anesthesia. The surgeon and anesthetist must always employ personal judgment in the selection of cases in which it may best be used. It is not an experimental practice, as it was a few years ago, but even so, and with much experience in spinal anesthesia, we find we still have many difficulties. In taking up spinal anesthesia, without doubt many mistakes will be made in its use, some of them fatal, and it should not be undertaken lightly.

I would suggest that instead of having the epinephrine administered in the operating room, the injection be given fifteen or twenty minutes before, so as to get the optimum stabilizing effect on the blood pressure.

DON CAMERON, M. D., Fort Wayne: I want to emphasize a few of the good conclusions of Dr. Sexton.

Especially I think it is important to emphasize the dangers in the use of spinal anesthesia rather than the advantages. There are many advantages, as Dr. Sexton stated, but personally, after I used spinal anesthesia almost routinely for a year and a half, during which time I had many scares, I came to the conclusion that the danger was too great, and after fifteen or twenty of such cases I abandoned it altogether except in patients known

to be chronic alcoholics, or in patients requiring operation below the belt. I would not want to use it for anesthesia as high as the stomach or gall-bladder, because every now and then in the use of high spinal anesthesia the systolic pressure drops to less than 65, and down to 50 in some cases. Under those circumstances, collapse of the patient ensues. As Dr. Sexton stated, in the case of a patient with a blood pressure of 150, 180, or 200, and in old people where they are said to die of heart trouble, it is usually due to respiratory and circulatory collapse.

Dr. Labat mentions one thing about which I am so sure he is wrong that I want to state my experience. He emphasizes that even after the injection of the heavy solution the patient should be placed in the Trendelenberg position immediately. I do just the reverse. I do not like to have the head down if it can be avoided, after the use of heavy solution. I do lower the patient's head if he seems to be going into collapse, in order to get the blood to his head.

C. R. PETTIBONE, M. D., Crown Point: During the winter season, when we have a lot of respiratory infections and respiratory exposures, I believe that spinal anesthesia has its advantages and is of vast importance. Under such circumstances an anesthetic which must be inhaled is more dangerous, in my opinion, and the use of better judgment would point to the use of a spinal anesthetic. For several years I have been an advocate of spinal anesthesia. It was a big thing, a much discussed and a much used thing for possibly twelve to eighteen months, and now I think its use is beginning to wane. It is said that you will get your fatal results from spinal anesthesia within two or three hours; I absolutely disagree with this. You may get deaths in twenty-four, thirty-six, or forty-eight hours from spinal anesthesia, but even so I think there is a great deal to be said in its favor. However, I wish that some older man would sound a note of warning for, with all of its advantages, we still need to keep our fingers crossed in using spinal anesthesia.

## THE NIRVANOL TREATMENT OF CHOREA\*

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During the last two years it has been my privilege to treat twenty-six cases of Sydenham's chorea at the Riley Hospital. These cases were admitted at random and so do not represent a selected group in any sense. All stages of the disease were represented—the chronic as well as the acute.

Because of our rather unsatisfactory methods for the treatment of this condition it was decided to

investigate the use of a new drug called nirvanol which has had a considerable vogue in the treatment of Sydenham's chorea in Germany. Chemically the drug is formed by the combination of urea and glycol. It bears the chemical name of phenylethylhydantoin and its chemical formula greatly resembles that of luminal except that nirvanol has one more CO group. It exists as a white, odorless powder and is well tolerated by mouth.

Phenylethylhydantoin was introduced in Germany<sup>1</sup> under the name of nirvanol as a sedative for use in sleeplessness, epilepsy, and psychosis. The drug was given a more or less extensive trial as a hypnotic<sup>2</sup> until it was noticed that when administered over a long period of time severe symptoms, such as a rash and fever, were apt to occur.<sup>3</sup> The occurrence of these symptoms caused several authors to warn against the use of the drug.<sup>4</sup> In 1919 Frieda Roeder used nirvanol as a sedative in two cases of chorea and discovered that chorea cases were benefited markedly by the drug when it was administered over a sufficient period of time to produce a rash and fever. Since this time several German workers have given reports of excellent results.<sup>5, 6, 7</sup>

### NIRVANOL SICKNESS

To obtain satisfactory results with nirvanol one must aim at the production of a specific reaction which is termed "nirvanol sickness." The syndrome characteristic of nirvanol sickness has three features, namely, hyperpyrexia, eosinophilia, and a peculiar skin rash.

Usually within three days after the beginning of nirvanol administration the sedative effect of the drug is observed. The patients become drowsy and lose interest in their surroundings. Choreic motions are diminished definitely and the patients seem more comfortable. For twelve to twenty-four hours before the reaction appears there is generally an increase in choreic motions, the patients become restless and complain of headache and many are incontinent of urine. The knee jerks frequently disappear. Suddenly the temperature rises and a definite rash appears. Hyperpyrexia generally is observed in all cases of nirvanol sickness. The temperature may reach as high as 105 degrees by mouth; however, it ordinarily never exceeds 103. The pulse rate usually rises and falls with the temperature. In most instances hyperpyrexia lasts about three days and falls by lysis. A few cases remain afebrile throughout the entire course of the treatment and yet develop a marked rash, while others have a temperature and no rash.

The rash commonly begins with startling suddenness. It first appears as small, slightly elevated, bright red papules, symmetrically located on the extensor surfaces of the elbows and knees and over the buttocks and torso. This rash spreads so that at the end of twenty-four hours it involves the entire body including the palms of the hands and the soles of the feet. Clinically it has the early appear-

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ance of measles; however, it shows a marked tendency to coalesce so that at the end of forty-eight hours a diffuse erythema is produced not unlike that of scarlet fever. The face ordinarily is free from that eruption but occasionally shows a marked erythema with circumoral pallor. After the rash has become confluent it gradually subsides in intensity and usually entirely disappears in seven days after the beginning of the reaction. In exceptional cases the rash may be so mild as to be barely discernible and may remain localized with but little tendency to spread, while a few cases develop no skin reaction whatsoever. It was possible to produce the rash in twenty-four of the twenty-six cases reported.

The most characteristic feature of nirvanol sickness is the development of a true eosinophilia. A differential count was made daily on each of our patients during their entire hospitalization. The eosinophil count characteristically started to rise on the third day of medication and rose slowly until just preceding the appearance of the rash and temperature when it suddenly showed a tremendous increase. In the twenty-six cases receiving the drug the maximum eosinophil rise was 18 per cent, the minimum 5 per cent, and the average 9 per cent. The percentage remained high for a period not to exceed three days and then gradually subsided to regain the normal in an average period of ten days.

So consistent was the eosinophilia that it was possible to predict the development of the temperature and rash by their sudden rise. The degree of eosinophilia seemed to have no relationship to the degree of temperature or the intensity of the skin reaction. In two cases the eosinophilia was the only sign of reaction observed, the temperature and skin reaction failing to occur. In addition, there is generally a leukopenia with a decrease in the polymorphonuclear cells and a relative lymphocytosis and monocytosis which may precede the sudden rise in eosinophils. In this connection it is well to note the work of Leichtentritt, Lensfeld, and Silberberg,<sup>11</sup> who administered the drug orally to rabbits and caused a marked leukopenia with a relative lymphocytosis. When the drug was continued long enough the bone marrow became seriously affected and an aleukemia was produced closely resembling that occurring in benzol and salvarsan poison. Freer<sup>12</sup> reports the case of a boy whom he treated for chorea with nirvanol, and who developed the alarming symptoms of agranulocytic angina; however, he eventually recovered. For these reasons it is felt advisable to follow the differential count daily to be sure that one recognizes the reaction as being present and thus avoiding an overdose.

#### INTRODUCTION OF NIRVANOL SICKNESS

In general, it seems that nirvanol sickness may be induced in any subject whether rheumatic or not; however, cases apparently resistant to the drug are sometimes met with in which it is impossible to produce any symptoms of the reaction whatever.<sup>10</sup>

Nirvanol acts cumulatively, so sufficiently large doses must be administered over a long enough period of time to obtain the desired effect. In this series of cases a uniform dosage of 0.3 grams of nirvanol was administered once daily irrespective of age or weight. The drug was given by mouth with a glass of water one hour before the noon meal.

As soon as symptoms of nirvanol sickness appeared the drug was discontinued immediately. Tolerance of the drug was found to vary greatly with the individual. One case developed the typical symptom complex on a total of three doses, while in some it was found necessary to administer as many as twenty-one doses to produce any sign of the reaction. No relationship between dosage, age and weight or severity of the chorea was observed. It was found to be impossible to regulate the severity of the reaction or to predict the amount of the drug required to produce the reaction in any given case. In the twenty-six cases that reacted to the drug it required an average of nine doses or 2.7 grams to produce symptoms.

It is felt inadvisable to exceed a total of fourteen doses since few reactions occur after fourteen doses, and since cases that require a larger amount of the drug are not apt to react favorably when the reaction is produced. There is also a very real danger of producing permanent damage to the bone marrow by too long a continuation of the drug as has been noted previously.

#### EFFECT ON CHOREA

In general, the improvement in choreic symptoms following nirvanol sickness is immediate and spectacular. Just preceding the onset of the reaction choreic manifestations are somewhat aggravated, but as the reaction begins to subside they disappear with dramatic rapidity. The finer movements are the first to go, usually completely disappearing within ten days following the reaction, while some of the coarse body movements may persist for a longer period of time.

It appears possible to arrest the course of chorea in any stage although the acute cases seem to respond more readily than the subacute or chronic. Cases having the most severe manifestations of nirvanol sickness seem to respond more readily than the others; however, the beneficial results obtained do not always depend on the development of the rash and temperature. The only invariable symptom produced, following which improvement ensued, was the eosinophilia, as marked improvement was observed in cases in which either the temperature or rash or both were missing.

In my series of twenty-six cases eighteen showed marked improvement in ten days, sixteen being entirely free of symptoms. Five showed complete disappearance in twenty days, and three while greatly improved retained a few coarse body movements after a period of thirty days. Whitaker<sup>13</sup>

reports that in eleven cases treated there was no sign of active chorea one month after the reaction. Ashby<sup>15</sup> reports complete disappearance of symptoms in his twelve cases in twenty-one days. Ray and Cunningham<sup>14</sup> report the complete disappearance of symptoms in their series within thirty-one days. Dennett and Wetchler<sup>16</sup> report complete recovery in seventy-two cases after twenty-one days. Similar results are attested to by Poynton and Schlesinger<sup>17</sup> and others,<sup>18, 19</sup> and Roeder,<sup>5</sup> Reitschel,<sup>20</sup> Hefter,<sup>7</sup> Huslef,<sup>6</sup> Metzдорff,<sup>9</sup> Huber,<sup>21</sup> Keller,<sup>23</sup> Lesigang,<sup>23</sup> and others in Germany. On the other hand Bendix<sup>24</sup> and Buttner in Germany, and Weinfeld and Cohen<sup>25</sup> (six cases) in America, can see no advantage in the use of nirvanol over any other method in the treatment of Sydenham's chorea.

Apparently the reaction does not affect a rheumatic carditis unfavorably; in fact, rather the opposite was found to be true. In eight of our cases mitral murmurs were present on admission to the hospital, in three of these cases the murmurs entirely disappeared following the treatment, while five remained unchanged. Poynton and Schlesinger<sup>17</sup> found that rheumatic nodules could be made to disappear with nirvanol and, since Ashoff's nodules in the myocardium are histologically quite similar it is suggested that they also may be influenced favorably by the drug, thus distinctly benefiting a rheumatic carditis. On the other hand, East and Cullinan<sup>19</sup> report two cases who developed rheumatic fever shortly after a successful nirvanol treatment.

#### RELAPSE

Relapses have been reported at varying intervals after the first successful nirvanol treatment. Apparently here again nirvanol will arrest the disease. It is interesting to note that the second reaction usually is not so severe as the first and a rise in eosinophils may be the only symptom.<sup>17</sup> Most writers report a very low percentage of relapses, the highest being thirteen out of seventy-two as given by Dennett and Wetchler.<sup>16</sup> In this series we had only two out of twenty-six.

#### DANGERS

No permanently harmful effects developed in any of our series of cases; however, some immediate consequences were observed which while not being permanently harmful were certainly distressing. In one case the exacerbation of choreic symptoms that occurred at the height of the reaction was so severe as to cause considerable anxiety as to the patient's favorable outcome; however, as the reaction subsided his choreic symptoms rapidly disappeared. In another case a secondary reaction occurred fully five days after the disappearance of the initial temperature and rash. The temperature rose to 105 degrees by mouth and a secondary rash appeared which was much more severe than the first. The eosinophils rose to a second peak which, however,

was not so high as the first. The patient developed an adenitis, ulcerative stomatitis and gingivitis, and an ulcerative conjunctivitis, but made a rapid recovery followed by an extreme degree of desquamation. Secondary reactions of this type also have been reported by Keller,<sup>22</sup> and Poynton and Schlesinger.<sup>17</sup> Some observers feel that these secondary reactions may be precipitated by exposure of the child to sunlight immediately following the reaction and, therefore, warn that convalescent cases should not be exposed to natural or artificial sunlight for at least three weeks following medication.<sup>22</sup> In our patients, however, no exposure to sunlight had taken place. In this series a troublesome furunculosis developed during convalescence in fully fifty per cent of the cases. Dyspnea associated with swelling of the tracheo-bronchial lymph nodes has been noted. Freer<sup>12</sup> reports a case that developed an agranulocytosis with ultimate recovery. Majerus<sup>26</sup> reports a case that developed a hemorrhagic nephritis followed by death; however, at autopsy this patient was proved to have a streptococcic septicemia. Segar<sup>28</sup> observed a case, hitherto unpublished, in which a boy suffering from a deforming arthritis received 0.3 grams daily doses of nirvanol and developed a characteristic rash and temperature on the fifth day. The temperature instead of subsiding steadily increased to 107. The patient became comatose and died. It should be noted, however, that at the beginning of medication the patient had a leucocyte count of 24,000, which rapidly decreased to 5,000 in four days. At no time did the patient develop an eosinophilia.

There has been much discussion as to the mode of action of nirvanol. Unfortunately very little animal experimentation has been reported, so its pharmacology and toxicology still remain somewhat in the dark. The drug is unique in that it can produce a reaction so closely resembling the acute exanthemata with a more or less characteristic blood picture.

Poynton<sup>10</sup> feels that chorea is primarily a meningo-encephalitis which particularly affects the corpus striatum and, therefore, he feels that nirvanol acts merely as a sedative affecting the nervous rather than the rheumatic factors of the disease. As Ray and Cunningham<sup>14</sup> point out, there have never been any studies done on the localization of nirvanol in the central nervous system or its elimination from the body. Since nirvanol so closely resembles luminal in chemical structure, which to the best of our knowledge is concentrated in the thalamus and corpus striatum, the thought suggests itself that nirvanol may be concentrated in the same manner, which may account for the sudden disappearance of choreic symptoms.

Sutton,<sup>29</sup> after observing the favorable results obtained in chorea by the artificial induction of fever via typhoid vaccine, suggests that the benefit derived from nirvanol lies largely in the fever produced. In our series of twenty-six cases four failed



to respond with any temperature whatsoever; however, their recovery from chorea was prompt and spectacular. This same phenomenon has been observed by Poynton<sup>10</sup> and others.<sup>14-17</sup> The mechanism of fever production in nirvanol sickness is somewhat obscure. It is more or less certain that it is not due to stimulation of the central heat regulatory mechanism as Lesigang<sup>24</sup> demonstrated that antipyrin was without effect in shortening the temperature produced.

DeRudder<sup>27</sup> found a tendency to alkalosis in patients approaching the reaction which closely resembled that found in preanaphylactic tetany which he thought accounted for the temporary increase in choreic symptoms commonly observed just preceding the appearance of nirvanol sickness. During the reaction he found a sudden shift from alkalosis to acidosis which he claims has a marked sedative effect on the central nervous system, causing the sudden disappearance of choreic symptoms. Poynton and Schlesinger<sup>17</sup> demonstrated an alkalosis; however, they could not demonstrate an acidosis at any stage of the treatment. Dennett and Wetchler<sup>16</sup> demonstrated an acidosis in only one of their seventy-two cases. Thus it seems that further work is needed in this field.

DeRudder<sup>27</sup> feels that nirvanol sickness is identical with serum sickness; however, if we accept the theory that anaphylaxis cannot occur unless it is due to a protein antigen we must look elsewhere for a solution. It is true that a shift in the acid base of the blood, eosinophilia<sup>30</sup> and skin reactions are characteristic of serum sickness; however, it is equally true that they may all exist in allergic states as well. Therefore, Lesigang<sup>23</sup> concludes that the reaction is allergic rather than anaphylactic since allergy can be caused by non-protein antigens. It is entirely possible, however, that nirvanol may in some manner alter the individual's body proteins in such a manner as to cause them then to react as foreign proteins, or nirvanol may be truly antibactericidal and kill large numbers of organisms which then act as foreign protein giving rise to a condition of anaphylaxis. Nevertheless, it seems that allergy gives us the best solution as to the action of nirvanol.

#### COMMENT

Nirvanol gave a very prompt cessation of symptoms in twenty-six cases of Sydenham's chorea and seemed greatly to shorten the course of the disease. This treatment has been the most satisfactory of any used at the Riley Hospital; however, it is not without danger. It is questionable if one is justified in using a drug capable of producing death in treating a strictly self-limited disease and certainly nirvanol should not be used outside of hospital practice. If, on the other hand, nirvanol is found to be truly antirheumatic it should have a definite place in our armamentarium.

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#### HISTORICAL NOTE—HOOSIER INCUNABULA

In the September, 1933 (page 405), number of this JOURNAL under the title "Hoosier Incunabula," I discussed the "Practical Treatise on Diseases Peculiar to Women and Girls" by Dr. Buell Eastman, which book was the second medical book published in the state of Indiana. In evaluating Eastman's work I said, "It seems a pity that his talents were not turned to a worthier cause than the production of a popular guide to medicine." I have just found that a year following publication of the above mentioned work, Eastman copyrighted and five years later published a quite pretentious "Systematic Treatise on Medicine." The earlier work was advertised as being "Particularly Adapted to the Use of Heads of Families and Midwives" whereas the later volume is described as being "Particularly Adapted to the Use of Physicians, Students and Families," in other words, a text-book of medicine. It was published in Cincinnati in 1851.

My copy is a duodecimo of 480 pages in contemporary calf, in an excellent state of preservation. All of the commoner diseases are discussed, treatment being outlined in both the "regular" and eclectic methods. There is a section devoted to minor surgery, including fractures and dislocations, a chapter on anatomy, a dispensatory, and finally a glossary and thesaurus of medical terms. It is a book of which any author might well be proud.

EDGAR F. KISER, M. D.

# THE JOURNAL

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MAY, 1934

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## EDITORIALS

### HUMAN STERILIZATION

We would classify the average herdsman or plant grower as an optimistic and practical eugenicist so far as his stock and grain are concerned. The alarming eugenicist sees little hope for the present race of mankind and wonders how soon our architecture, art, science, and other accomplishments will be the objectives of some other people to study as remains of a lost civilization.

Birth control in general and human sterilization as one of the methods in certain cases occupies a great deal of attention in medical and lay literature today. Whether it is tasteful or otherwise, an educational campaign in these particulars is with us. The hereditary aspects of those inclined to be unfit by virtue of limited mental stock is not too well understood, yet much of the accepted clinical information has not been included in the curricula of the medical schools. Inasmuch as the general practitioner is the first in his community to be approached on these subjects it would be wise for him to refresh his knowledge on the salient points of eugenics governing the probable mentality of offspring of given parents. Likewise an acquaintance with the surgical procedures incident to sterilization and the usual physiologic responses of the patient should be known.

According to Myerson, the paranoids, certain of the senile and involuntal, the manic depressives, and the schizophrenics present vertical transmission possibilities. Also certain toxic conditions altering the spermatozoa or ovum before fertilization may act as a direct primary cause for defect, and all primary defects are considered as transmittable. Acquired conditions happening to the individual before or after birth present the secondary forms and are not considered vertically trans-

mittable. On this point much contention is held relative to eugenic sterilization. However, when one goes to study, particularly the problem of feeble-mindedness which in numbers is five times greater than the insanities, little direct or proven information can be had relative to secondary happenings to the development of the central nervous system in utero. Review of the literature on this subject resolves itself into a general statement that this is a good subject for research. In other words we do know by actual observation of families much more about heredity than about other prenatal causes for mental defect. Conditions arising after birth and affecting the nervous system of the child are more prevalent than many physicians suspect. Many of the so-called milder infections have left unidentified neurological scars with subsequent mental defect.

However, whether a person is feeble-minded from hereditary causes or acquired conditions, his economic progress as well as his matings and in most instances his social contacts will be with the feeble-minded. Under these circumstances the products of spawning will be hybrid at the best, and the defective's ability to care for such offspring will be far from satisfactory. We can see little importance in distinguishing between these two types except for legal reasons.

State medical societies as groups have given little attention to sterilization legislation. The matter was discussed briefly before the House of Delegates of the A. M. A. in 1928. A suggestion of the Board of Trustees that this matter be studied was not adopted. Our own State Association has endorsed the procedure. Since 1897 law making bodies have been experimenting with statutes covering the subject, Indiana being the first commonwealth to pass such an act, in 1907. Since then some sixty-five laws have been enacted and many of them repealed because of defects. Today the Virginia Law of 1924 best covers the subject and has been copied in this state. All legal objections have been met even by hearings before the U. S. Supreme Court. Twenty-seven states and six foreign countries have laws for sterilizing the unfit, the law in Germany being the latest one and involving the lessons learned in the legal experiments of the United States. The Indiana law of 1907 was declared unconstitutional in 1920 because of its opposition to the 14th amendment of the U. S. Constitution. In 1927 an act similar to the Virginia law was passed, covering mental patients being cared for in county or state tax supported institutions. In 1931 an act was passed causing the sterilization hearing for the feeble-minded to be had at the time of their commitment to the State School, the Circuit Court Judge and the physicians being called upon to register opinions. This act was originated as an educational project to learn just what the doctors and judges were thinking about, and it gives a cross section of an educational nature and has prompted this editorial and more of the specific data will be



given later. From this data it is evident that more education is needed before sterilization as a community project can be wholly endorsed. The problem of who shall be the judge is raised. Analogy might present the question of who should be the judge for commitment, incarceration, or taking of any liberties. There is a feeling that institution staffs represent the best final court in these cases. Here the research should be continued. The probable political aspects of a state eugenics board makes that procedure discouraging.

The present wave of enthusiasm calls for a balancing of thought and the medical profession can do this by acquainting itself with the facts that there are many cases of mental defect which are purely custodial; that even though the feeble-minded procreate very rapidly, their death rate is quite high, the death rate of idiots under ten years of age being ten times that of normal children; that most of the congenital luetics die before the sixth year; that there is a difference between primary and secondary mental defect; that sterilization will not begin to solve every problem of crime, delinquency, or mal-social-adaptation; and that sterilization is not as Landman and others state, a panacea for anything, but it is in individual cases an adjunct in any social program. Eugenism rather than eugenics is the problem.

#### THE DOCTOR AND THE PRIMARY

Tuesday, May eighth, is Primary Day in Indiana. Always a day of importance to the thinking voter, it is doubly so this year when opportunity is offered to express one's convictions on many of the important economic questions, with which we at present are most abundantly supplied. We speak advisedly when we say that the primary affords such an opportunity, because the intelligent voter has plenty of occasion to know not alone for whom he is voting but just what most of the candidates stand for. We have been voting since the presidential election of 1896; we believe we have exercised that right with at least the average degree of intelligence and good judgment; but never in our memory, so it appears to us, has the primary been of such great importance as at the present time.

Voters usually are thoroughly imbued with the knowledge that something is wrong, either with our system of government or with those who are presumed to be able to carry on the government; in either case it is to the intelligent voter that we must look for relief. It is one thing to sit idly by, replete with criticisms of all sorts, yet do nothing of a concrete nature to remove the need of criticism. The Constitution of the State of Indiana affords ample opportunities for this each two years, and it is but for us to accept the responsibility.

While there are numerous matters that must receive our studious attention, there is one detail that should not be overlooked, and that is the mat-

ter of legislation affecting the medical profession of Indiana. By and large the legislators of Indiana, during the past thirty-five years, have dealt rather kindly with us; they have established a pretty fair sort of regulation of the practice of the healing art in the state. It has been and still remains our first duty to see to it that meddling hands do not break down this present system; if changes are to be made, they should be constructive and not destructive. One hundred and fifty men and women of Indiana, one hundred in the House and fifty in the Senate, will convene in January of 1935, there to enact such legislation as is deemed advisable; this group is sent there by the votes of the electorate of the state. Here, then, lies the opportunity of the medical men of Indiana; four thousand trained, educated men and women of the medical profession can exert a mighty influence in the selection of our legislators. There is not a single county in Indiana where we cannot have a huge voice in the election of these candidates. Nor do we mean that it is necessary (often it is most inadvisable) that physicians enter directly into politics, and seek to bring about the things of which we are speaking. In the course of a day or a week the average doctor sees a lot of folks, many of whom have reason to know that their doctor is a man of wide observation, and a little word here, another there, will do far more good in a campaign of this sort than all the stump speeches that the whole group might make. A few years ago a gentleman from a neighboring city represented his community in the Indiana House; he had pledged himself not to molest the medical profession; he forgot that pledge, it seems, as he voted against us, right out, wide open. Two years later he was a candidate for the Senate. When the local medical society sent out its legislative report, this fact was prominently displayed. Immediately the gentleman in question called us, stating that it made no difference to him, that he would just as soon have the medical profession against him as for him, that we could go to it—then go some place else! We did go to it; we "ganged" on this chap, with the result that Primary Day, for him, was a veritable Waterloo.

Your State Association has an active and energetic legislative committee, most of the county societies are also organized, and most members have ere this received full information as to the status of legislative candidates as regards matters medical. It is now up to the individual member, and to groups of members, to get going. There remains one week for this activity. We urge you to get busy and to remain busy. If you have one or more legislative candidates who have not openly stated that they will deal fairly with the medical profession, see to it that your patients and friends know about it. Explain to them that it is more than a matter of preservation of the medical law of the state; it is a matter that may affect the health-right of every citizen of Indiana.

## OLDSTER-BLOCS vs. YOUNGSTER-CLIQUEES

The above hyphenated words are used for two reasons: First to condemn them, most emphatically. They have absolutely no place in progressive and aggressive, organized medicine. Second, for the very specific purpose of pointing out not only the individual *rights* and *privileges* of the members of each group, on the one hand, but also to name their respective *duties* and *obligations*, on the other. A positive and definable mutuality of interest exists. The oldster owes much to the youngster, and vice versa, the youngster owes much to the oldster. Upon their continued and continuous cooperation the one with the other, in every detail, and upon their successful coordination in their every effort, depends the future advance and development or the future degeneration of medical practice, tomorrow, next month, next year, and in the decades to come. Inescapably, this is true.

In any and every organized group or body whatsoever, be it a church, lodge, social society, luncheon club, labor union, employers' association, or even a political party, the most advantageous course to be pursued can be determined and the greatest solidarity of endeavor can be attained only if there exists close-knit within that group or body a reasonable and proper balance between age and youth. Otherwise the fabric will stretch or shrink; certainly it will not wear. Why? Because, on the one side, age has the conservatism and judgment which comes only from the experiences gained in many hard-fought battles; age has learned much by the simple process of trial and error; age has the politic wisdom and sagacity obtained only by having watched the well-oiled, internal machinery revolve, as the pendulum of thought swings ceaselessly back and forth. On the other side, youth has the snap and sparkle of genius; youth has the vigor and the endurance; youth has the courage and the enthusiasm; youth knows no philosophy of defeatism. Pulling together, age and youth can go far; traveling alone, each must face the inevitable handicaps and the only-too-often-fatal hazards.

These facts must be evident to every student of the affairs of mankind. The broad and straight highway has been marked and blazed for us by those who have gone before; by the wayside lie the wrecks and the failures of those who have strayed. Let us heed the lessons as we pass. Reflect for but a moment upon the gigantic struggle engaged in by our forefathers when they framed the Constitution of the United States. One side was excessively liberal, pulling toward the radical left; the other was unwarrantedly conservative, straining equally hard toward the right. There were those who strove mightily to make the federal government over-powering in strength and influence; others were equally positive that the individual states should dominate. Backward and forward swept the battle lines of bitter debate. Finally, that wise and sagacious statesman, Benjamin Franklin, pointed

out the mutuality of interests involved; then, and then only, was effected that coordinated compromise which has withstood the tests of one hundred fifty years.

If these elemental factors are true in the social and the industrial worlds, and in the evolutions so constantly taking place in the civic and the governmental affairs of man, then how much more applicable, indeed, are they in the field of organized medicine! From the American Medical Association on down through the respective State Associations into the component County Societies, themselves, these fundamental and basic principles must continue in effect if we wish to be an alert and progressive profession.

Let us discuss a hypothetical case, concretely. A young physician, recently graduated from medical college and internship completed, starts to practice in a new town or city. Whether the community has two or ten or fifty or a hundred or more other doctors, longer established there, what should be their attitude toward this neophyte? Should they malign him, cold-shoulder him, belittle him, cast aspersions on his character or ability, refuse to consult with him, or place barriers and obstructions in his way? No! Decidedly, no! He should be given his chance to develop and prove or disprove his worth. He should be invited into the local organization, given minor tasks to perform, and his footsteps guided into the proper paths. He should be helped. Why? Potentially at least, at that time of his life he is the greatest *undeveloped resource* available to organized medicine! He can be made a leader! It depends on him and how he is handled by his associates.

On the other hand, the young, newly-starting physician has certain obligations. He must live right morally and practice ethically in order to deserve the continued respect of his elders. He must remember that he is stepping into a highly organized profession with the up-building of which he has had nothing to do; it was ready-made for him by those who had gone before. He should be neither too impatient with nor too rebellious to its customs and traditions until such time that his criticism may be constructive instead of destructive only. He cannot attain the top in one leap. He must prove himself capable of handling responsibility. He must build himself up in stature for the position he wishes to occupy both within the profession and in the community at large in which he lives. The only limitations as to how far he can go are his own ambition, his own initiative, and his own ability—i. e., what he wants to put into it in the way of effort. Hubbard says: "Responsibilities gravitate to the person who can shoulder them; power flows to the man who knows how."

In nearly every field of endeavor, incompetency soon tends to seek its level, and the addle-brained gravitate together to commiserate each other upon their miseries. But, it is hoped, our profession has none such. The modernly trained physician



possesses a potentially-abstract-thinking brain, an inquiring type of entity, a brain capable of reasoning; and, indeed, dull-witted he must be who does not recognize that his own selfish interests are interwoven most intimately with the combined and coordinated efforts now being put forth by organized medicine, from the local societies on up through the A. M. A., itself, without regard to sect or section, clan or creed, clique or coterie, or bloc.

No, the picture is neither overdrawn nor impossible. Never before in the history of organized medicine has there been greater need for every practicing physician to put his shoulder to the wheel. Never before, from within and without, have the bulwarks of our ideals been more strongly assailed. Never before have we been more strongly united, standing en masse. Never before have we proven more worthily and more conclusively that we are deserving of the responsibilities placed in our hands.

So let us continue to stand!

#### APPENDICITIS AND MORTALITY

Appendicitis is still one of the chief causes of hospital mortality. It is still common to find at least one paper on treatment or mortality statistics of appendicitis on the programs of the meetings of the leading surgical societies, and regularly the surgical journals continue to print discussions on some phase of appendicitis.

It would seem that the mortality from appendicitis depends upon two main factors: first, the length of time between the onset of symptoms and diagnosis and operative treatment; and, second, upon the giving of cathartics or food during the attack. Delay in the former is frequently the fault of the attending physician, if he is given the chance to see the patient early; the latter is more likely to be the fault of self-dosing or home medication by the patient or his family. The question of cathartics must continue to be a problem of lay education; that of diagnosis and treatment must depend upon the intelligence and conscientiousness of the attending physician.

Theoretically, the problem of appendicitis should be simple—early diagnosis and early removal of the appendix, within forty-eight hours of the onset at the very latest. All evidence would demonstrate that there is no expectant or temporizing treatment of acute appendicitis. No surgeon or clinician of note will be found who offers any other treatment than operative removal of the inflamed appendix as soon after diagnosis as possible.

Many years ago Dr. A. J. Ochsner recommended, for neglected cases of appendicitis of over fifty hours standing with beginning diffuse peritonitis, rigidity, temperature of 103° and pulse of 130, that instead of operating at once, heat be used, morphine be given to quiet peristalsis, nothing be given by mouth and fluids be given abundantly extra-

orally until in the judgment of the surgeon the appendiceal abscess could be opened with a greater degree of safety and drainage established. Many well known surgeons at the present time in a similar way recommend this procedure for neglected cases of appendicitis as the safest method, and especially so for those surgeons who do not have the skill, experience and judgment of a Murphy or a Deaver.

Unfortunate it was after Oschner's recommendations were published, and more unfortunate it is even now, that we find histories where this type of treatment has been used as an expectant or temporizing treatment for early acute appendicitis. We still hear of attempts to "starve out" and "freeze out" an appendix.

Never has one of these surgeons recommended a delayed operation for anything other than a possible better way out of a bad situation due to a neglected and unintelligently cared for case of acute appendicitis. Furthermore, anyone who recommends or has recommended a delayed operation for a neglected case of appendicitis all the more dogmatically insists on immediate operation when the diagnosis of acute appendicitis can be made on the finding of deep localized pain at the site of the appendix alone, without waiting for vomiting, rigidity, the development of fever, or leukocytosis.

Too many people die of appendicitis, unnecessarily. The only apparent solution is early diagnosis with early removal of the appendix, and impressing upon the public the fact that treatment of a "stomach ache" should be done only on the advice of a physician.

#### EDITORIAL NOTES

PRELIMINARY announcement is made of the post-graduate course for 1934, to be held at the Indiana University School of Medicine May twenty-first to June second. Those in charge of arranging the course have profited by the experiences of former years and believe they will have an offering that will meet with much approval from our membership.

THE American Society for the Control of Cancer issues a monthly bulletin that should be of interest to physicians concerned in the subject, as most of us are. It is a very readable, informative bulletin and provides up-to-the-minute information as to what is being done with the cancer problem. A letter addressed to the Society, 1250 Sixth avenue, New York City, will bring a copy of the current bulletin free of charge; the annual subscription is but a nominal sum.

AGAIN we remind delinquent members that June first is the deadline for mailing *THE JOURNAL* to those who have not paid their 1934 dues. In addition, it should be borne in mind that your malpractice defense automatically ceased as of February first. Less than three hundred Indiana physicians are delinquent at this writing—a record of which we are inordinately proud, for we believe that few states can better the record. However, those members will be without their *JOURNAL* after June unless they pay up promptly.

THE other day an Indianapolis man was asked to address an adjoining county society; on inquiring as to whether they wished to suggest a subject he received this reply: "Talk on anything you choose, but please do not talk on medical economics." Evidently this membership was just about fed up on that subject. It is true that some of our county societies went a little too far in trying to solve the vexing economic problems that have been before us, of late; we know of one of the larger groups whose attendance took on a very sudden slump, due to the fact that for more than a year the monthly meetings were replete with all sorts of economic discussions.

SOME time ago we called the attention of our readers to the fact that for a period of years in the past Indiana had not fared so well at the hands of the American Medical Association in the way of appointive and elective positions. The Executive Committee suggested that a statistical table be prepared, showing just how many such positions Indiana has held in a period of ten years. Elsewhere in *THE JOURNAL* this table appears (page 227). We believe that the membership will be interested in a comparative study of it. We still insist that for one reason or another Indiana has not had her just share of recognition. Even a casual study of the facts presented would seem to bear out that statement.

MANY years before the dinner of the Miami County Medical Society at the Log Cabin in Peru, on March twentieth, Charles Lamb wrote a classic in regard to the high gustatory rating of roast pig. Even the writer, Lamb, probably could have done a better job of it had he been present at the "good fellowship" dinner given by the Miami physicians, at which a roast pig supplied by Dr. James B. Shoemaker, of Miami, was the pièce de résistance. The dinner was all that the advance notice advertised it would be, and besides an almost 100 per cent attendance from Miami County, hungry visitors from Huntington, Logansport, and Kokomo were on hand to enjoy the get-together. This

was indeed a worthwhile meeting, and might serve as a suggestion to other societies in getting away, occasionally, from the ultra-scientific meeting.

PHYSICIANS of Indiana should be pleased with the annual postgraduate course presented by Indiana University, because of its nature and calibre. A wide variation of subjects will be discussed, not only by the faculty of Indiana University, but by teachers of national reputation. For those physicians who have wished for an opportunity to review their anatomy and pathology, a second optional week has been arranged. During this week instruction in laboratory technique will be available. For those who are interested in surgery, there will be special instruction in technique in the experimental laboratories. A careful survey of the features of this course, and the fact that the instruction is within easy reach of all and given at a cost that is exceedingly nominal, will assure Indiana physicians that attendance at the course will be time well spent.

#### LES SAVANTS NE SONT PAS CRIEUX

"Doctors must die too, all their knowledge of  
Digitalis, adrenalin, henbane,  
Matters little if death raps again—  
Once he may be forestalled by their great love  
Or little love that is merely human;  
Doctors must die as other men and women.

"Yes, they know the coronary well,  
The lenticulo-striate, as a quick bell  
In the village church, and when those strike their  
knell  
What may have been well is no longer well.

"Knowledge of nature gives exemption to  
No one, his father, and to no one's son;  
No one is probably the only one  
Who lives any longer than most mortals do."

—MERRILL MOORE.

From *The Commonweal*, January 14, 1934.

A FEW days ago we were reading a description of the wonders of the Neuro-Calometer and some of its most recent modifications. It seems that the work of this machine is of such importance that a special society has been formed, composed of those who are using the apparatus, and the organization issues a journal which is replete with testimonials from those who are believers in the "cause." The editor is a former drugless member of the Indiana State Board of Medical Registration and Examination, residing and practicing in Indianapolis. While we have had no personal experience with any of these new-fangled machines, which are claimed to make an exact diagnosis, and while we have never seen any of them in operation



we are inclined to believe in the instruments of precision as at present used by the medical profession. True it is that a large number of our people seem to like the mysterious; if it is mystery they want, they can find it in the Micro-Dynameter and the Neuro-Calometer; it must indeed be at least intriguing to watch the reactions of the various "pointers," when one is the patient whose ills are being "diagnosed."

RECENTLY there have appeared in the lay press numerous advertisements regarding the "marvelous" properties of Crazy Water Crystals. Headquarters office recently wrote to the editor of an Indianapolis newspaper regarding a statement appearing in that publication, apparently written by the local manager of the company interested in this product. We quote from the letter: "Crazy Water Crystals advertisements claim to relieve constipation, to aid elimination through kidneys and bowels, for rheumatic aches, arthritis, neuritis, upset stomach and excess acidity, biliousness, bad complexion, common colds, etc., when faulty elimination is a principal or contributing cause." It is interesting perhaps to know that Glauber's salt is the predominating ingredient of this nostrum for which these claims are made and that for all practical purposes the make-up of this product is Glauber's salt with certain added amounts of washing soda, epsom salts, common salt and other salines for which the public pays \$1.50 a package and which could be purchased for a few cents at any drug store." This is but another example of the lengths to which nostrum-promoters are going these days. Not content with the old method of advertising, they now make covert attacks on the medical profession—another name for sniping. It reminds us of the advertisement of an optometrist which invariably carried the expression, "We do not use drops."

THE April seventh number of *The Journal of the A. M. A.* carries two interesting case reports, together with an editorial, on the subject of dinitrophenol poisoning. This comparatively new drug is being used as a reducing agent and seems to have aroused the interest of a large number of folks who feel they are becoming a little too plump. A druggist advises us that he has had a number of prescriptions from the local profession and that a considerable number of people make direct purchases. In the latter connection he states that he has instructed his employees to give out no information regarding dosage but that they are permitted to sell the drug when called for. In one of the reported cases, both of which resulted in death, it seems that the druggist gave specific instructions as to how to use the drug; it is apparent that he was more than liberal in his dosage suggestions. We are advised by several people that they have heard the drug recommended over the radio

and that no warning is given as to its dangers. Fishbein states that at least two physicians who broadcast health messages have recommended this treatment, and that they have not indicated the dangers attending it. One physician of our acquaintance reports that the drug certainly does remove excess flesh but that one of his patients had a most serious reaction, following the advised dosage, and that he had advised that its use be discontinued. It would be well for those of our folks who are prescribing this preparation to look well into its dangers and keep in close touch with such patients as are under this treatment.

OCCASIONALLY we note in the lay press an item of unusual interest regarding the medical profession. In the *Chattanooga Times* for March 23, 1934, appears an editorial that should meet with the approval of the entire medical profession. It strikes us as being very much worth while, and we reprint it in full:

*"Medical Profession and Depression.* When Tennessee doctors assemble in Chattanooga for the annual convention of the Tennessee State Medical Association, April 9 to 12, they will not come as a class who have profited by the depression. Members of the medical profession, like the members of other classes, have been hard hit. Charity practice has increased enormously, and collections from those expected to pay have slowed down and in countless instances amounted to nothing.

"Many members of the medical profession have, no doubt, found the going rather difficult financially since 1930. There has been practice, but little or very slow pay. For some reason it seems to be the disposition of many people, if not most, to put off paying their doctors until everybody else has been paid. In the meantime, the physician gets along as best he can.

"In his efforts to keep the business side of his life on an even keel, he finds himself in a very different position from that occupied by the merchant, the lawyer, or those engaged in other branches of service. The merchant can refuse to sell on credit to one who is known to be a bad risk; but the doctor cannot refuse to answer a call for help because the caller has no credit, without getting a reputation which no physician desires. The lawyer may refuse to take a case unless paid a fee in advance, but the nature of the doctor's service is such that it would be inhuman for him to do so. The garage man may hold a car for the cost of repairs, but the doctor cannot hold his patient until he is paid.

"Wherever there is need for medical or surgical attention, there the doctor may be found, administering to human need. His presence often spells the difference between life and death. Should not he receive in the matter of promptness of compensation fully as much consideration as the butcher, the baker, and the candlestick maker?"

## DISTRICT MEETINGS IN MAY

### THIRD DISTRICT

President—Robert Smallwood, Bedford  
 Secretary—Howard Allen, Bedford  
 Place and date of meeting—Bedford, May 2, 2:00 p. m.

#### *Program*

Addresses by:

A. M. Mendenhall, M. D., Indianapolis  
 Herman Morgan, M. D., commissioner of health, Indianapolis  
 A. E. Newland, M. D., Bedford  
 Subject, "Abdominal Pain"  
 George Dillinger, French Lick  
 Subject, "Pediatrics"  
 E. E. Padgett, M. D., Indianapolis  
 The Auxiliary will entertain the ladies  
 Past presidents of the Third District Society will meet after the dinner.

### FOURTH DISTRICT

President—R. L. Compton, Osgood  
 Secretary—George S. Row, Osgood  
 Place and date of meeting—Osgood, May 24

#### *Program*

Addresses by:

E. E. Padgett, Indianapolis  
 Louis H. Segar, Indianapolis  
 D. Hamilton Row, Indianapolis  
 Mr. Thomas A. Hendricks, Indianapolis  
 R. L. Compton, Osgood  
 W. H. Stemm, North Vernon  
 J. F. Treon, Aurora  
 William A. Shuck, Madison  
 H. P. Graessle, Seymour

Following the meeting of the house of delegates at 11:00 a. m., all physicians present will be entertained at luncheon.

Visiting ladies will be entertained with a luncheon-bridge.

Banquet at 6:30 p. m.

### FIFTH DISTRICT

President—W. D. Gerrish, Clinton  
 Secretary—James V. Richart, Terre Haute  
 Place and date of meeting—Terre Haute, May 4

#### *Program*

Dinner, Hotel Deming, at 6:00 p. m.  
 District meeting in conjunction with Vigo County Medical Society, Aesculapian Society of Wabash Valley and Terre Haute Academy of Medicine  
 Speaker: R. B. Osgood, Harvard University  
 Subject: "Treatment of Arthritis"

### SIXTH DISTRICT

President—W. R. Phillips, Glenwood  
 Secretary—(C. S. Houghland died April 15, 1934)  
 Place and date of meeting—Newcastle, May 31.

#### *Program*

Because of the untimely death of Dr. C. S. Houghland, of Milroy, the program for this district has not been completed and is not available for publication. Dr. Houghland has been a faithful and active worker in his district and it is with regret that we note his death.

### NINTH DISTRICT

President—S. B. Sims, Frankfort  
 Secretary—Ivan E. Carlyle, Sedalia  
 Place and date of meeting—Frankfort, May 17

#### *Program*

Golf tournament, Country Club course, 8:30 a. m.  
 Delegates' luncheon, 12 noon, for delegates, presidents and secretaries, at the Clinton County Hospital.

Addresses by:

Hon. C. E. Crawford, Mayor  
 M. F. Boulden, president, Clinton County Medical Society  
 Ralph G. Carothers, Cincinnati  
 Subject: "Treatment of Compound Fractures"  
 Edwin N. Kime, Indianapolis  
 Subject: "Prognosis in Cancer"  
 Robert Carothers, Cincinnati  
 Subject: "Reminiscences—44 Years in Practice"  
 William F. McBride, Dayton  
 Subject: "The Country Doctor—Forty Years of It"

Banquet at 6:30 p. m., at the Country Club

Charles P. Emerson, Indianapolis  
 Subject: "Oriental Medicine"

Ladies will be entertained with luncheon, at the Country Club, followed by bridge and theater parties

### TENTH DISTRICT

President—T. W. Oberlin, Hammond  
 Secretary—N. K. Forster, Hammond  
 Place and date of meeting—Valparaiso, May 29

#### *Program*

Dinner meeting at Lembke Hotel, 6:30 p. m.

Speaker: Edward A. Oliver, Chicago  
 Subject: "Diagnosis and Treatment of Some of the Commoner Skin Diseases." Illustrated with lantern slides

### ELEVENTH DISTRICT

President—J. E. Yarling, Peru  
 Secretary—O. G. Brubaker, North Manchester  
 Place and date of meeting—Kokomo, May 16

#### *Program*

Clinic at 10 a. m., under auspices of Howard County Medical Society

Afternoon speakers will be:

Donald Abbot, Chicago  
 A. L. Harter, Kokomo (dentist)  
 H. Allison Miller, Marion

Regular banquet and evening program 6:00 p. m.



Tabulation of Officers and Committees of the American Medical Association  
Over a Ten Year Period\*

Recently there has been some comment concerning the matter of state representation in the American Medical Association, and for that reason the present study was undertaken covering a period of ten years. The results are shown in the following table:

	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34	Totals: Ten Year Period
Alabama	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 2	11
Arizona†	...	...	...	...	...	...	...	...	...	...	...
Arkansas†	...	...	...	...	...	...	...	...	...	...	...
California	0 2	0 2	0 2	0 2	0 2	0 1	0 1	0 1	0 1	0 1	14
Colorado	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 1	0 1	...	14
Connecticut	1 4	5 4	1 5	1 6	1 6	1 5	1 4	1 8	1 9	10 10	71
Delaware†	...	...	...	...	...	...	...	...	...	...	...
District of Columbia	1 2	3 2	1 3	1 2	1 3	1 4	1 5	0 4	0 4	0 4	39
Florida†	...	...	...	...	...	...	...	...	...	...	...
Georgia	...	...	1 0	1 0	1 0	1 0	1 0	1 0	1 1	1 2	11
Idaho†	...	...	...	...	...	...	...	...	...	...	...
Illinois	3 14	3 17	3 19	4 19	4 20	4 17	4 18	3 22	3 25	3 26	212
Indiana	0 1	0 1	0 1	0 1	0 1	0 1	0 2	0 2	0 1	0 2	13
Iowa	...	...	...	...	...	...	...	...	...	...	...
Kansas	...	...	...	...	...	...	...	...	...	...	...
Kentucky	...	...	...	...	...	...	...	...	...	...	...
Louisiana	1 1	0 2	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 2	13
Maine†	...	...	...	...	...	...	...	...	...	...	...
Maryland	0 3	0 3	0 2	0 2	0 2	0 1	0 2	0 1	0 2	0 2	21
Massachusetts	0 3	0 3	0 6	0 4	0 4	0 5	0 5	0 5	0 6	0 6	49
Michigan	1 2	3 3	1 4	1 3	1 4	1 3	1 4	2 2	1 3	1 2	34
Minnesota	1 3	4 5	1 6	0 4	0 3	1 3	0 4	1 2	0 3	1 3	36
Mississippi†	...	...	...	...	...	...	...	...	...	...	...
Missouri	0 1	...	1 1	2 2	3 2	0 2	0 2	0 3	0 1	0 1	16

	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	1933-34	Totals: Ten Year Period
Montana†	...	...	...	...	...	...	...	...	...	...	...
Nebraska	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 ...	9
Nevada†	...	...	...	...	...	...	...	...	...	...	...
New Hampshire†	...	...	...	...	...	...	...	...	...	...	...
New Jersey	...	1 0	1 ...	...	...	...	...	...	...	...	1
New Mexico†	...	...	...	...	...	...	...	...	...	...	...
New York	0 2	1 5	1 6	0 5	0 5	0 6	0 6	0 8	0 8	1 9	65
North Carolina†	...	...	...	...	...	...	...	...	...	...	...
North Dakota†	...	...	...	...	...	...	...	...	...	...	...
Ohio	1 3	1 4	1 5	1 4	1 5	1 4	1 5	1 4	1 5	1 6	51
Oklahoma†	...	...	...	...	...	...	...	...	...	...	...
Oregon	2 0	1 0	1 0	1 0	1 0	1 0	2 2	1 3	1 3	1 1	13
Pennsylvania	1 1	1 2	1 3	1 4	1 3	1 2	1 3	1 2	2 3	0 2	30
Rhode Island†	...	...	...	...	...	...	...	...	...	...	...
South Carolina†	...	...	...	...	...	...	...	...	...	...	...
South Dakota†	...	...	...	...	...	...	...	...	...	...	...
Tennessee	1 0	1 0	1 0	1 1	1 1	1 1	1 1	1 1	1 1	1 1	10
Texas	0 1	1 0	2 0	1 0	1 0	1 0	...	...	...	...	8
Utah†	...	...	...	...	...	...	...	...	...	...	...
Vermont†	...	...	...	...	...	...	...	...	...	...	...
Virginia	0 2	0 1	0 1	0 1	0 1	0 1	...	...	...	...	7
Washington	...	...	...	...	...	...	...	...	...	...	...
West Virginia†	...	...	...	...	...	...	...	...	...	...	...
Wisconsin	1 0	1 0	1 1	1 2	1 2	1 1	1 2	1 2	1 3	1 2	20
Wyoming†	...	...	...	...	...	...	...	...	...	...	...
Totals	63	76	76	75	74	75	83	86	88	91	787

\* Under each year, the upper figure in left column refers to elective officers, the lower figure to appointive; the right column shows total. Offices of president, president-elect, vice-president, secretary and general manager, treasurer, speaker of the house of delegates, and members of the board of trustees are considered elective. Various councils and standing committees are appointive, although some are confirmed by the house of delegates. The offices of librarian, editor, and general manager emeritus, and the officers of sections have been omitted from the tabulation.

† None for the entire period.

## THE PRESIDENT'S PAGE

### EDUCATIONAL WORK

Our third graduate educational meeting under the direct supervision of the Indiana State Medical Association has come and gone. These courses have been well attended, and I have yet to hear the first adverse criticism. This bears out a theory which we have long cherished.

We do not believe that a physician ever graduates. True, he finishes his required school work, his hospital training, passes his state board examination, and he is announced to the public by the state as one who is qualified and entitled to practice medicine. At this time his real work begins. No physician who expects to gain and retain a foothold with the public and the respect and admiration of his colleagues, can stop his training upon completion of required courses. There is not a single case that passes through his hands, which is not a postgraduate course in itself, if the physician has it in him to benefit by his experience.

The State Association always has endeavored to keep this idea foremost in the minds of its members. You can not give the best service to the public if you neglect opportunities to improve yourself.

The set-up of our present State Board of Health makes postgraduate teachers of every one of us. It has become known abroad as The Indiana Plan. The eyes of medical men in other states are focused on us hopefully. The eyes of the paid health worker from various sources and organizations is likewise focused on us; he shakes his head and says that he is afraid, and at the same time he neglects to say whether he is afraid we will fail or succeed.

We in medicine in Indiana are more favorably situated just now than any other body of medical men in the Nation. We cannot afford to fail, and we will not fail. All we need to do is to remember that our state and our public looks to us for the three essentials of the practice of medicine—education, prevention, and cure.

The very system under which the state association operates leaves out the idea that continued education of the physician is a definite part of our plan. As you well know, the ninety-two counties in our state support eighty-four county medical societies. After all is said and done, this is our very best agent in postgraduate work. Here you are not only a listener and a pupil, but you are expected to be a participant and thus a teacher. It is therefore not necessary that you travel far and wide for this work; simply grasp the opportunity that is brought to your very door.

Our state graduate educational course is simply a bringing together, once a year, of our members, to discuss the important subjects that have been interesting in your local societies. To my way of thinking, it should be very largely an Indiana pro-

gram. It is true that we must have some visiting speakers, but it is after all your postgraduate course, and it should be a definite part of your year's plan.

We believe this course is rightly held in different parts of the state each year. We believe the work should be divided between didactic and clinical teaching.

We believe that every man in the state should be encouraged to report work done, and to read papers before his local society in the hope that the subject in which he is interested may be presented at the time of our postgraduate meeting. Again this is your course, entirely in your hands. We hope you will offer any suggestions or criticisms that may be used by those who follow us, to make this a more valuable department.

### BRAIN TRUSTERS

Wasn't it interesting to see how intense the silence became in the realms of the "Brain Trusters," and the would-be "Constitution Busters" when our good friend Dr. William Wirt, of Gary, opened up his correspondence course? It is always refreshing to see a man take a definite stand on any subject, and then back up that stand; so far as we can see, any running away from the issue has not been done by Dr. Wirt.

There must have been some rather uneasy moments among these social up-lift boys when they tried to remember just what they did say. There seems to have been a very quiet exodus of these borers from within, which exit led in the direction of a good hole in which to hide. What more could be expected from a bunch of professors who get about \$1,800 a year, and earn about half that much?

Whether Dr. Wirt is, has been, or will be smothered in the investigation, is now and probably will remain a mooted question. Be that as it may, he has raised the issue, and a very important issue it is, and it will not be smothered in the minds of all right-thinking Americans. It has served in a very definite way to call the attention of the American public again to the social service racket, and it is a racket. There is plenty of reason to believe that if the basic ideas of some of these more radical gentlemen could be brought into the limelight, we would find that those ideas range from free love to anarchy and back again.

There is no doubt in my own mind that most of our unrest emanates from this class of agitators, and I am almost convinced that there is no place for the so-called trained social worker in medicine which cannot be filled as well or better by others.

Think it over.

*E. E. Padgett.*



SECRETARIES' COLUMN

By May eighth every county medical society secretary should see that every physician in his society knows the positions of all candidates for the legislature and Congress pertaining to the medical profession. He should have definite statements from them and should know their attitudes concerning the following subjects:

- Group hospitalization
- Group medical care
- Cults
- Group care (medical and hospital) in industry
- Immunization

Ask the candidate personally about these subjects. After you get his answer, tell him you are for him or that you are going to fight him. He will respect you for your fairness. The physician of today will have to accept the fact that he is in politics as much as anyone. If all the members of a county society will make their views known, they can wield a tremendous influence on behalf of the public welfare.

Get busy before the primary election on May eighth. If you know where you stand, your worries are over. If you do not know, then you will have to work hard all the time until the election in the fall.

How many physicians in your society are running for office? A physician in office and in politics is a valuable asset. His influence will be sufficient to help mold the minds of politicians on medical subjects.

Did you digest Dr. Van Etten's paper in the April issue of THE JOURNAL?

Recently I read an article in a daily newspaper on the subject of pyelitis. The physician who wrote the article advocated the use of hexamethylene-tetramine and acroflavine. He also said that "expensive, elaborate treatment was a mistake." Every physician knows that pyelitis is not always a simple condition to treat. I believe it would be worth while for the medical societies to protest to headquarters office and to the newspapers about such articles. Watch your daily newspapers for these articles. If you find they are off color—protest!

Has the immunization program in your county been completed? I believe this work and the health talks that are being put on over the state will convince the busy philanthropists that Indiana has not gone to the dogs as far as health is concerned.

A. M. MITCHELL, *Chairman.*

DIPHTHERIA REPORT FOR MARCH

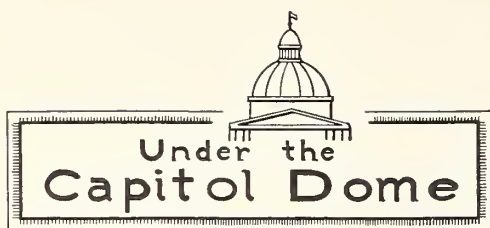
During March of this year there were twelve deaths from diphtheria. This brings the total up for the first quarter of the year to thirty-five. Frankly we had hoped for a better figure than this, even though it is the smallest number that has been recorded for the first three months of the year. We obviously have an opportunity to make the lowest figure that has even been attained, but it is going to take considerable effort to hold the number below one hundred, which is the objective that we had set for ourselves.

The time of the year has come, of course, when diphtheria will rapidly decrease, in all probability. However, we must not forget that the three big months of the year, October, November, and December, will push the number over the one hundred mark, unless a great deal of effort is put forth.

Lawrence County reports two deaths for the month of March, and had already sent in one, making a total of three for this county so far this year. Perry County also has a total of three. These two counties, considering their population, have much the highest rate in the state.

Below will be found the figures for the month of March, and for the first quarter of this year.

County	March 1934	Total for 1934
Allen .....	0	4
Blackford .....	1	1
Delaware .....	1	1
Gibson .....	1	1
Grant .....	1	1
Greene .....	0	1
Harrison .....	0	1
Jackson .....	1	2
Knox .....	0	2
Lake .....	1	2
Lawrence .....	2	3
Marion .....	1	3
Martin .....	1	1
Montgomery .....	0	1
Perry .....	1	4
Spencer .....	0	1
Warrick .....	0	1
Vanderburgh .....	0	2
Vermillion .....	1	1
Wayne .....	0	2
Total .....	12	35



Licenses of one medical doctor and one chiropractor were revoked during the past month by the state board of medical examination and registration. License of Dr. John A. Newhouse, of Gary, was revoked after he had been convicted of violating the Harrison narcotic act. He came to Indiana to practice in 1929, obtaining a reciprocal license from Illinois. The chiropractor whose license was revoked was Clarence J. Myler, of Lagrange. The revocation resulted from his conviction on a criminal assault charge. He is serving a one to ten year sentence in the Indiana state prison at Michigan City.

The petition of C. C. Root, of Indianapolis, whose medical license was revoked in 1929 because of the operation of his alleged "diploma mill," to be reinstated, was refused by the medical board. Mr. Root had appealed repeatedly to be reinstated, and the action of the board last month was said to be final.

The medical board took similar action in the petition of Ezra H. Pleak, of Evansville, for reinstatement. Mr. Pleak's license was revoked in 1927 after he was convicted on a charge of performing an illegal operation.

The request of the Chicago Medical School for recognition by the state board of medical registration and examination was refused by the board. Under present regulations, graduates of the school are not permitted to take the Indiana medical examination, and the board likewise refuses to accept Illinois physicians, graduates of the school, on reciprocal agreements.

Dr. E. R. Porter, living in South Bend, an osteopath, was refused a license through reciprocity from Michigan by the state medical board. The action resulted from Dr. Porter's "inability to comply with requirements."

Licenses to practice drugless healing were issued to two applicants by the board. Adeline M. Powers, of Hammond, was granted a chiropractor's license, and Fred H. Baier, of Hartford City, was granted a license to practice physio-therapy.

## THE VOICE OF MEDICINE

Just at the time when all other business is apparently improving and adopting "codes" of fair competition (in other words, a code of ethics), the business of the practice of medicine seems to be breaking into and endeavoring to occupy the position of ruinous cut-throat bidding, vacated by industry.

Information continues voluntarily to reach my desk concerning ruinous competition and bidding for work of almost all characters, for federal, state, municipal and industrial appointments. Two or three examples will suffice to demonstrate what is taking place.

A large manufacturing plant wanted its employees examined physically and by x-ray for silicosis. The management went to various physicians and roentgenologists and received bids ranging from \$8.00 to \$15.00, this to include the services of at least two physicians.

Another instance: a hospital bid against private roentgenologists for a series of chest plates.

In one city private roentgenologists have bid as low as \$2.50 to make chest plates for the school city.

One could continue to give examples of what is taking place among the profession sufficient to fill pages. The disheartening and really disgusting part of the whole business is the apparent breaking down at a critical time of the cooperation, the *esprit de corps*, which has so carefully been built up over these many years, at a time when other lines of endeavor have begun to realize the worth and the necessity of a code of ethics. That we, the pioneers, the teachers, should now break under economic pressure just when that pressure is being relieved; that we should deny our birthright, ignore the teachings of our forefathers and yield to commercialism is beyond conception.

Oh, ye of little faith! Cannot you see beyond the end of your nose? Cannot you see the woods extending far beyond the first line of trees, and that it contains many of nature's loveliest gifts—flowers, birds, the crystal waters of running brooks? Cannot you see the rest, pleasure, contentment, and happiness contained therein? Cannot you see that by destroying the trees, the birds will disappear, the flowers will wither, the brooks will dry up, and you will be standing in a desert waste exposed to the heat of the sun, the withering winds, and surrounded by snakes and lizards?

Come, let us again rally stanchly around our code, desperately defend it, even unto death, for do we not, we will die by a slower, more unpleasant method. Is it necessary to state who supplies the heat and the wind, or who will be the snakes and lizards?

—A Former President.



## DEATH NOTICES

PERRY LAWSON FERRY, M. D., of Akron, died in a hospital at Warsaw, March thirtieth. Dr. Ferry was fifty-four years old. He served in the medical corps during the World War in base hospital No. 122. He graduated from Cornell University Medical College, New York, in 1904.

JESSE F. DAVIDSON, M. D., of Crawfordsville, died March thirty-first, following a long illness. Dr. Davidson was eighty years old. He was a member of the Montgomery County Medical Society, the Indiana State Medical Association, and graduated from the Medical College of Indiana, Indianapolis, in 1880.

JULIUS A. CHEVIGNY, M. D., of Hammond, died in Austin, Texas, March seventeenth. Dr. Chevigny was sixty-two years of age. He had practiced medicine in Hammond for twenty years, and during the World War he served in the medical corps of the U. S. Army. Dr. Chevigny was a member of the Lake County Medical Society and the Indiana State Medical Association, and was a graduate of the University of Montreal Faculty of Medicine in 1895.

CHARLES S. HOUGHLAND, M. D., of Milroy, died April fifteenth, aged sixty-two years. Dr. Houghland was a member of the Rush County Medical Society and the Indiana State Medical Association, and was secretary of the Third District Medical Society at the time of his death. He graduated from the Marion-Sims College of Medicine, St. Louis, in 1892.

JAMES N. MCCOY, M. D., of Vincennes, died April sixteenth, aged sixty years. Dr. McCoy was a member of the Knox County Medical Society, the Indiana State Medical Association, the American Medical Association, and the American Roentgen Ray Society. He graduated from the Medical College of Indiana, Indianapolis, in 1896.

HARRY A. BOYDE, M. D., of Indianapolis, died April sixteenth, aged forty-five years. He graduated from the University of Louisville School of Medicine in 1913.

## HOOSIER NOTES

MR. E. MEAD JOHNSON, president of Mead Johnson and Company, Evansville, died March twentieth.

DR. AMOS REUSSER, of Berne, celebrated his thirty-seventh year in the practice of medicine, March twenty-third.

DR. H. G. COLE, Hammond, has been appointed secretary of the board of health to fill the vacancy caused by the death of Dr. Julius A. Chevigny.

DR. FRANK W. FOXWORTHY, of Miami Beach, formerly of Indianapolis, has been awarded the congressional medal for gallantry in action in the Philippine Islands.

THE Hancock County Medical Society reports every physician in the county a member of the society, and every dentist in the county is an affiliated member.

THE tenth scientific session of the American Heart Association will be held on Tuesday, June twelfth, at the Cleveland Hotel, Cleveland, Ohio. The program will be devoted to arteriosclerotic heart disease.

GLEN R. HILLIS has been named receiver for the Kokomo Hospital Realty Company, which formerly operated the Howard County Hospital. Action for receivership was brought by Charles and Vita B. Muir, of Indianapolis.

FROM the medical library of the late Dr. Earl Heath, of Advance, fifty volumes have been given to the library of the Indiana University School of Medicine. The collection includes texts of immediate value to medical students, and many older works which are of historical importance.

JUST preceding the meeting of the American Medical Association, the American Association for the Study of Goiter will meet in Cleveland, Ohio, June 7th, 8th and 9th. The program includes the names of well known men in the United States and Canada who are interested in the subject of goiter.

THE official call to officers, fellows and members of the American Medical Association has been sent out for the eighty-fifth annual session of the Association to be held in Cleveland, Ohio, Monday to Friday, June eleventh to fifteenth. Headquarters will be the Statler Hotel. Make your reservations now and plan to attend.

GRANTS in excess of \$10,000 have been made from the Jessie Spalding Landon Research and Educational Fund to further investigational work in several fields of medical science through the Indiana University School of Medicine. The work is under the direction of the University staff and is concentrated in the various departments of the school. The Landon grants are made from income derived from the fund of \$200,000 provided for research and educational purposes in the will of Mrs. Landon who died in 1930.

THE American Medical Golfing Association will hold its twentieth annual tournament at the Mayfield Country Club in Cleveland, June 11, 1934. Thirty-six holes of golf will be played in competition for the fifty trophies and prizes in the eight events. The Association, organized in 1915, now totals 1,100 members representing every state in the Union. All male Fellows of the American Medical Association are eligible and invited to become members. Application should be made to the executive secretary, Bill Burns, 4421 Woodward Avenue, Detroit.

THE International Congress of Lymphatism will be held at La Bourboule, Puy-de-Dome, June ninth and tenth, under the patronage of the Ministers of Foreign Affairs, Public Works, and of Health. Another meeting in France will be the International Scientific Conference on Rheumatoid Arthritis which will be held at Aix-les-Bains, Avoie, June twenty-eighth to July first, and will be sponsored by the French League against rheumatism. Further information is available from the Federation of the Health Resorts of France, 610 Fifth Avenue, New York City.

Increased demands have been made upon the Bureau of Publicity of the Indiana State Medical Association for speakers, for both county medical society meetings and lay meetings. If you have timely material to present, and are willing to attend meetings for the purpose of presenting a paper, please complete the form below and mail it to The Bureau of Publicity, 1021 Hume Mansur Building, Indianapolis, where a reference file will be kept.

Name of Physician.....  
Address .....  
Subject .....  
For presentation before: lay audience.....  
Medical Society.....

THE annual meeting of the American Association on Mental Deficiency will be held at the Hotel Waldorf Astoria, New York, May twenty-sixth to twenty-ninth. The Saturday (May twenty-sixth) session will be devoted to the sociological, psychological and the special educational aspects of the problem in order that local social workers and school teachers may have opportunity to attend. The Tuesday afternoon session will be a meeting held conjointly with the American Psychiatric Association. Further information may be obtained from the secretary, Dr. Groves B. Smith, Godfrey, Illinois.

ESSAYS will be received in competition for the Samuel D. Gross Prize of fifteen hundred dollars until January 1, 1935. The prize is awarded every five years to the writer of the best original essay, not exceeding one hundred and fifty printed pages, octavo, in length, illustrative of some subject in surgical pathology or surgical practice founded upon original investigations. Candidates for the prize must be American citizens. Details may be obtained by addressing the Trustees of the Samuel D. Gross Prize of the Philadelphia Academy of Surgery, care of the College of Physicians, 19 South Twenty-second Street, Philadelphia.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

- Don Baxter Intravenous Products Corporation.
  - Sterile 2½% Dextrose in Physiological Sodium Chloride Solution in Vacoliter Container
  - Sterile 5% Dextrose in Physiological Sodium Chloride Solution in Vacoliter Container
  - Sterile 7½% Dextrose in Physiological Sodium Chloride Solution in Vacoliter Container
  - Sterile 10% Dextrose in Physiological Sodium Chloride Solution in Vacoliter Container
- Eli Lilly & Co.
  - Solution Liver Extract Concentrated—Lilly
  - Ampoules Solution Liver Extract Concentrated—Lilly, 10 cc.
- G. D. Searle & Co.
  - Tablets Procaine Borate Without Epinephrine
- Sharp & Dohme, Inc.
  - Antipneumococcic Serum, Types I and II Combined—Mulford
  - Antipneumococcic Serum, Concentrated (Pneumococcus Antibody Globulin, Types I and II)—Mulford
  - Diphtheria Toxoid, Alum Precipitated (Refined)
  - Live Oak Pollen Extract—Mulford; Red Clover Pollen Extract—Mulford; Sweet Clover Pollen Extract—Mulford; Southern Ragweed Pollen Extract—Mulford.



## INDIANA UNIVERSITY NEWS NOTES

KENNETH A. GROW, of Indianapolis, has been elected president of the Phi Beta Pi professional medical fraternity at Indiana University. Dillon J. Kennington of Michigan City is the newly elected vice-president of the fraternity.

DR. GERALD TIMMONS, secretary of the Indiana University Dental School faculty, has been re-elected for the second year as secretary-treasurer of the American Association of Dental Schools, an organization including all of the 38 dental schools of the United States and five in Canada. Dr. Timmons is editor of the proceedings of the Association.

RECENT developments in the treatment of mastoiditis, sinusitis and other diseases of the head and neck were studied intensively by physicians and surgeons from Indiana and other states in a two-weeks' postgraduate course conducted at the Indiana university medical center April 16-28. Dr. John F. Barnhill and other members of the staff of the I. U. school of medicine conducted the course. The daily program consisted of clinical instruction, lectures and demonstrations, dissection, applied anatomy, and cadaver surgery.

"MODERN Poison Hazards, Real and Imaginary" was the subject of a lecture given recently by Dr. R. N. Harger, head of the bio-chemistry and pharmacology department of the Indiana University school of medicine, before chemistry, pre-medical and medical students at the Bloomington division of the university. Dr. Harger explained recent developments in the chemistry of determining minute quantities of certain poisons, some new sources of chronic poisoning and scientific evidence on a number of popular fallacies regarding alleged poison hazards.

THE following students of the Indiana University Medical School were initiated into the Phi Beta Pi professional medical fraternity March 18 in Indianapolis: Blair Harter, Hagerstown; Clark Truesdale, Hanover; William Wood, Evansville; John Eisterholdt, Evansville; Dillon Kennington, Michigan City; Maurice Kuhn, Plymouth; Robert Husted, Woodburn; Louis Bixler, Elkhart; Don Lashley, Evansville; James Fuelling, Woodburn; Robert Smithson, Evansville; Sheldon Rader, Bloomington; Harold Blackburn, Huntington; Bard Logan, Greenfield; Kemper Venis, Muncie; Jack Louderman, Indianapolis; John Glackman, Rockport, and Kenneth Grow, Indianapolis.

## BOOK REVIEWS

### BOOKS RECEIVED

ALLERGY IN GENERAL PRACTICE. By Samuel M. Feinberg, M.D., F.A.C.P., assistant professor of medicine and attending physician in Asthma and Hay Fever Clinic, Northwestern University Medical School. 339 pages, illustrated with 23 engravings and a colored plate. Cloth. \$4.50. Lea and Febiger, Philadelphia, 1934.

FRACTURES, DISLOCATIONS, AND SPRAINS. By John Albert Key, B.S., M.D., clinical professor of orthopedic surgery, Washington University School of Medicine; and H. Earle Conwell, M.D., F.A.C.S., orthopedic surgeon for the Tennessee Coal, Iron and Railroad Company, Birmingham, Alabama, and member of the Fracture Committee of the American College of Surgeons. 1,164 pages with 1,165 illustrations. Cloth. Price \$15.00. The C. V. Mosby Company, St. Louis, 1934.

### BOOKS REVIEWED

THE DISEASES OF INFANTS AND CHILDREN. By J. P. Crozer Griffith, M.D., Ph.D., Emeritus Professor of Pediatrics in the University of Pennsylvania; and A. Graeme Mitchell, M.D., medical director and chief of staff of the Children's Hospital Research Foundation and director of pediatric and contagious services, Cincinnati General Hospital. 1155 pages with 281 illustrations. Cloth. Price \$10. W. B. Saunders Company, Philadelphia and London, 1933.

The third edition of our long-used volume by Griffith and Mitchell has now been condensed into one volume. This has been done by the condensation of sentences, but with no loss of actual material.

This book can be recommended as one of the most authoritative and complete textbooks for medical students or general practitioner. The book contains a complete resumé of pediatric practice. Each subject is treated completely and thoroughly. The references are strictly up to date and are collected at the end of each chapter. The photographs and charts are well done.

TREATMENT OF THE COMMONER DISEASES MET WITH BY THE GENERAL PRACTITIONER. Lewellys F. Barker, Professor Emeritus of Medicine, Johns Hopkins University. 319 pages. Cloth. J. B. Lippincott Co., Philadelphia, 1934.

This book of three hundred pages should be interesting to the physician for whom it is written, the general practitioner. It is up to date in its methods of treatments and gives definite information rather than controversy. It attempts to give the best tried treatments of the present time in the light of the great maze of journal articles which the general practitioner often has not the opportunity nor the time to wallow through.

Dr. Barker has kept in mind to discuss the commoner diseases and not the unusual and the curious.

He begins with a discussion of the advances in methods of studying patients. He then takes up the commoner infectious diseases, the commoner disorders of the respiratory system, of the circulatory system, the blood and blood building organs, the digestive apparatus, the kidney and urinary passages, the locomotor system, nervous and mental diseases, and metabolism and the endocrine system.

MODERN CLINICAL PSYCHIATRY. By Arthur P. Noyes, M.D., Superintendent of State Hospital for Mental Diseases, Howard, Rhode Island, formerly chief executive officer at the Boston Psychopathic Hospital. 485 pages. Cloth. Price \$4.50. W. B. Saunders Company, Philadelphia and London, 1934.

The first four chapters of this book give the clinician's point of view in dealing with energetic, behavioristic, and the mechanistic aspects of mental reactions. This gives a more

hopeful approach to the matter of therapeutics of mental disorders and minimizes the gap between the so-called normal and so-called abnormal mentalities and their behaviors. The chapter on psychobiological constitution and reaction types is timely in keeping up with the trends toward constitutional medicine as seen today. The prognostic value of these approaches undoubtedly does lend a help to the ones dealing in preventive mental hygiene work with children. All salient points for history taking are well presented, especially the emphasis put on the history of psychosexual relations, occupational records, and psychological traumas. For practical purposes the examination of the patient is greatly enhanced by the paragraphs on the examination of the supposedly inaccessible patient. The author very ably points out the discrepancies in the present classification of mental diseases. It is to be regretted that he did not suggest one of his own. The handling of the special subject matter for each disease is ample and the proper emphasis to place on the laboratory work is to be commended in that the clinician is still left to make the diagnosis. In any community the feeble-minded outnumber the insane five to one. It is to be regretted that this book overlooks their importance as a medical and psychiatric problem and devotes only one twenty-third of its pages to the mental defectives.

**MENTAL HYGIENE IN THE COMMUNITY.** By Clara Bassett, Consultant in Psychiatric Social Work, Division on Community Clinics, The National Committee for Mental Hygiene, Inc. 394 pages. Cloth. Price \$3.50. The Macmillan Company, New York, 1934.

It is hard to tell what the author considers the community since the book itself about covers the universe. A great many books on this subject fail to define the subject. This author very wisely presents the two definitions by others wherein one calls it a science and the other calls it an art. Furthermore, a great many books are written on this subject by persons gathering a few facts from their own brief experience, throwing these facts together and calling them a treatise. This volume has not done this. Subject matter for each phase has been carefully gathered from centers, industries, clinics, and elsewhere and edited with scrutiny. After one has read a chapter he can feel that what has been said has been backed up by experimental evidence. Especially will physicians be interested in the phase which covers the subject matter as pertains in medical school among medical students. The profession also will be interested in what the author has to report on the connection between mental hygiene and theology. This phase the psychiatrist realizes over and over is in need of emphasis. The demand for teachers properly trained to look into the training of the defectives in the public schools should not have to be emphasized, yet there is a great lack in normal schools for the covering of this subject. With ever increasing shorter hours for the laborer the present chapter on recreation must necessarily soon be rewritten.

INDIANA DIVISION OF PUBLIC HEALTH

REPORT OF BUREAU OF COMMUNICABLE DISEASES

Month of March, 1934

Diseases	Mch. 1934	Feb. 1934	Jan. 1934	Mch. 1933	Mch. 1932
Tuberculosis .....	124	111	167	179	192
Chickenpox .....	375	475	907	700	357
Measles .....	3803	2191	1432	393	241
Scarlet Fever .....	1599	1049	998	708	594
Typhoid Fever .....	14	10	6	7	11
Whooping Cough .....	299	244	182	130	246
Diphtheria .....	83	130	191	121	169
Influenza .....	202	303	329	334	880
Pneumonia .....	49	57	83	43	76
Mumps .....	75	96	131	284	437
Polio myelitis .....	1	1	1	1	1
Meningitis .....	8	7	10	24	32
Amebic Dysentery .....	1	1	0	0	0
Vincent's Angina .....	1	2	1	4	3
Smallpox .....	7	7	14	9	40

THURMAN B. RICE, M. D.

SOCIETIES AND INSTITUTIONS

COUNTY SOCIETIES

ADAMS COUNTY MEDICAL SOCIETY met at Decatur, April thirteenth. Dr. T. J. McKean, of Montpelier, presented a paper on "Banti's Disease."

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CARROLL COUNTY MEDICAL SOCIETY members met at Delphi, April thirteenth. Dr. Edgar F. Kiser, of Indianapolis, presented a paper on "Bedside Diagnosis of Cardiac Disease."

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CLINTON COUNTY MEDICAL SOCIETY met at the Coulter Hotel, Frankfort, April fifth. At the business meeting, Drs. J. S. Ketcham and A. G. Chittick were made members of a committee to meet with the county commissioners and endeavor to renew the contract with the county for the care of the indigent poor. Dr. P. E. McCown, Indianapolis, presented a paper on "Transurethral Removal of Bladder Neck Obstructions." Dr. W. W. Washburn, of Lafayette, led the discussion. Dr. Ivan E. Carlyle, as secretary of the ninth district, reported the program completed for the annual session of that district society.

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DEARBORN-OHIO COUNTY MEDICAL SOCIETY held its meeting in Aurora, March twenty-ninth.

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DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY held a dinner meeting at the Hotel Roberts, Muncie, April seventeenth. Eight members of the society presented five-minute talks upon subjects of current interest and importance in the practice of medicine. Speakers included Drs. W. C. Moore, J. H. Clevenger, E. C. Davis, C. A. Leatherman, C. L. Botkin, P. D. Moore, G. S. Young, and R. E. Cole.

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ELKHART COUNTY MEDICAL SOCIETY held its annual meeting at the Elkhart Hotel, April fifth, with fifty-seven physicians in attendance. Dr. A. S. Giordano, South Bend, substituted for Dr. W. G. Maddock, of Ann Arbor, as one of the principal speakers. Dr. Edwin M. Miller, of Chicago, talked on "Fractures in Children" and Dr. W. D. Sutcliffe, Chicago, spoke on "Serum Therapy in Pneumonia." This was an afternoon and evening meeting.

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ELWOOD MEDICAL SOCIETY met April tenth, at Elwood, with Dr. Paul Moore, of Muncie, as the principal speaker. Dr. Moore's subject was "X-ray and Radium Treatment of Diseases."

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FAYETTE-FRANKLIN COUNTY MEDICAL SOCIETY met April twelfth, with sixteen physicians in attendance. Dr. Karl R. Ruddell, Indianapolis, talked on "Postoperative Care."

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FLOYD COUNTY MEDICAL SOCIETY members met at New Albany, April thirteenth. Dr. W. B. Troutman, of Louisville, Kentucky, presented an illustrated paper on "Diseases of the Heart."

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FORT WAYNE MEDICAL SOCIETY (Allen County) met April third, in Fort Wayne, to hear Dr. Donald P. Abbott, of Chicago, discuss "Indigestion." The April seventeenth meeting was "clinical case night" for all members.



FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY members met at Kingman, April fifth, to hear Drs. E. E. Padgett and Thomas A. Hendricks, of Indianapolis, discuss medical economic subjects.

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GIBSON COUNTY MEDICAL SOCIETY met at Wheeler's Cafeteria in Princeton, April ninth, for a dinner meeting. Dr. J. R. Yung, Terre Haute, gave an illustrated talk on "Exophthalmic Goiter." The Gibson County Medical Society started its immunization campaign April ninth.

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GRANT COUNTY MEDICAL SOCIETY met at the Spencer Hotel, Marion, March twenty-seventh, with Dr. Robert Glass, Indianapolis, as the speaker. His subject was "Gait." Illustrative cases were presented.

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GREENE COUNTY MEDICAL SOCIETY met at the Freeman Greene County Hospital, April twelfth. Judge Raymond Powell, of Greene County Circuit Court was the principal speaker; he talked about the hospital and possible improvement of the building.

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HAMILTON COUNTY MEDICAL SOCIETY met at Carmel, March thirteenth, with Dr. H. M. Banks, of Indianapolis, as the speaker. His subject was "Bronchial Asthma." Attendance numbered twenty-six. The society met at Sheridan, April tenth, to hear Dr. Jack Shields, of Indianapolis, present a paper on "Exodontia." Society approved suggestion of Dr. Fred Wilson that the child health program and week be held earlier next year because of the early dismissal of rural schools.

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HANCOCK COUNTY MEDICAL SOCIETY met at the Columbia Hotel, Greenfield, April sixteenth, to hear Dr. James H. Stygall, Indianapolis, talk on "Some Facts Concerning Tuberculosis." Attendance numbered twenty.

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HOWARD COUNTY MEDICAL SOCIETY members met at Kokomo, with the Howard County Dental Society, April sixth, to hear Dr. Matthew Winter, of Indianapolis, discuss "Pediatrics." Attendance numbered twenty.

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INDIANAPOLIS MEDICAL SOCIETY held its March twenty-seventh meeting in the auditorium of the Indiana University School of Medicine, with four addresses presented by Dr. Jack Berman, Dr. George Bond, Dr. James Reeves and Dr. Maurice Kahler.

INDIANAPOLIS MEDICAL SOCIETY met at the Athenaeum April third to hear Dr. Russell L. Haden, of Cleveland, discuss "The Anemias." In the afternoon, Dr. Haden held a clinic on "Diseases of the Blood and Blood Forming Organs" at the City Hospital.

INDIANAPOLIS MEDICAL SOCIETY held its regular meeting at the Athenaeum, April tenth. Speakers were Drs. T. B. Noble, Jr., T. B. Noble, Sr., and John E. Dalton. Subjects were "Acute Appendicitis," "Chronic Appendicitis," and "Frei Test as a Differential Aid in Rectal and Labial Disease."

INDIANAPOLIS MEDICAL SOCIETY held its April seventeenth meeting in the auditorium of the Methodist Nurses Home. This was a joint meeting with the staff of the Methodist Hospital.

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JAY COUNTY MEDICAL SOCIETY met at the Portland Country Club, April sixth, with Dr. M. H. Draper, superintendent of the Irene Byron Tuberculosis Sanitarium as the speaker, his subject being "Refined Methods in Early Diagnosis."

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JEFFERSON COUNTY MEDICAL SOCIETY members met at Madison, March twenty-sixth, to hear Dr. Herbert F. Thurston, of Indianapolis, present an illustrated paper on "Puerperal Inversion of the Uterus." Attendance numbered eleven.

KOSCIUSKO COUNTY MEDICAL SOCIETY held a meeting at the Hotel Hayes, Warsaw, April tenth, with eight members and one guest in attendance. A general discussion formed the program.

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LAKE COUNTY MEDICAL SOCIETY met at St. Margaret's Hospital, Hammond, April twelfth. Dr. William A. Thomas, Chicago, presented a paper on "Recent Knowledge of Liver Function and Liver Insufficiency."

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LAPORTE COUNTY MEDICAL SOCIETY held a meeting at the Spaulding Hotel, Michigan City, April twelfth. Dr. Victor D. Lespinasse of Chicago presented a paper entitled "The Childless Couple—Cause and Cure." Attendance numbered thirty.

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LAWRENCE COUNTY MEDICAL SOCIETY met at Bedford, March seventh, to hear Dr. F. D. Martin discuss "Sinusitis" and Dr. Norman R. Byers talk on "Mastoiditis." Attendance numbered seventeen. The society met at Bedford, April fourth, with twenty-two physicians in attendance. "Recent Advances in X-ray and Radium Therapy" was the subject discussed by Dr. Harrington.

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MADISON COUNTY MEDICAL SOCIETY members met at St. John's Hospital, Anderson, March nineteenth. This was a dinner meeting. Dr. R. A. Solomon, of Indianapolis, was the speaker.

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MONROE COUNTY MEDICAL SOCIETY members heard case reports presented by Drs. Fred Batman and Harry B. Thomas at the meeting held in the Union Building, Bloomington, March twenty-second. A report on the immunization campaign was given by Dr. Philip Holland. On April twentieth, Dr. Rollin H. Moser, Indianapolis, presented a paper on "Some Medical Aspects of Gall Bladder Disease" before the Monroe County Medical Society.

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MONTGOMERY COUNTY MEDICAL SOCIETY met at the Culver Hospital, Crawfordsville. This society meets the third Thursday of each month.

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MUNCIE ACADEMY OF MEDICINE was addressed by Dr. Willis D. Gatch, Indianapolis, on "Medical Management in Fatal Illness and Death" at Muncie, April tenth.

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OWEN COUNTY MEDICAL SOCIETY met at Spencer, April twentieth, with Dr. Thurman B. Rice, Indianapolis, as the speaker. Dr. Rice discussed the reorganization of the State Board of Health.

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PARKE-VERMILLION COUNTY MEDICAL SOCIETY held its March meeting March twenty-first at the Vermillion County Hospital. Dr. Leon Zerfas, of Indianapolis, was the principal speaker, his subject being "New Developments in Medicine."

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PORTER COUNTY MEDICAL SOCIETY members met at the Lembke Hotel, Valparaiso, March twenty-seventh. Dr. Matthew Winters, Indianapolis, talked on "Infant Feeding." Attendance numbered fifteen.

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RANDOLPH COUNTY MEDICAL SOCIETY met at the Randolph County Hospital, Winchester, April ninth. Dr. R. A. Solomon, Indianapolis, discussed "Modern Treatment of Nephritis."

RIPLEY COUNTY MEDICAL SOCIETY met in Versailles, April eleventh. An interesting paper on "Asthma" was presented by Dr. M. Joseph Coomes.

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RUSH COUNTY MEDICAL SOCIETY met at Rushville, April tenth, to hear Dr. A. B. Graham, Indianapolis, discuss "Amebic Dysentery." Attendance numbered fourteen.

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SHELBY COUNTY MEDICAL SOCIETY members heard Dr. Charles P. Emerson, of Indianapolis, at their regular monthly meeting held in Shelbyville, April fourth.

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ST. JOSEPH COUNTY MEDICAL SOCIETY held a dinner meeting, March twenty-first, at the University Club. Fifty-nine members were present and nine guests were present. Dr. Emil Vrtiak, Chicago, was the guest speaker, his subject being "The Classification and Etiology of Arthritis." The paper was discussed by Drs. Sensenich, Bolling, Giordano, Fisher and Hilbert.

The March twenty-seventh meeting of the St. Joseph County Medical Society was held in the public library, with thirty-three members present. Dr. L. Faltin presented a paper on "Heart Failure" and illustrated his talk with drawings and Roentgen-ray plates. Discussants were Drs. Sensenich, Haley, Abel, Gordon, and Fisher.

Thirty-seven members and two guests attended the April third meeting of this society in the public library. Dr. H. D. Pyle presented a paper on "The Nutritional Disturbances of Infants and Children." The paper was discussed by Drs. Rosenbury, Miller and Knode.

The St. Joseph County Medical Society held its monthly dinner meeting April eighteenth, in the Indiana Club rooms, with thirty-eight members and eighteen guests present. Dr. Thurman B. Riee, Indianapolis, talked on "Local Immunization" including anti-virus and bacteriophage therapy. The paper was discussed by Drs. Marcus Lyon and Giordano.

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TERRE HAUTE ACADEMY OF MEDICINE held a dinner meeting, April sixth, to hear Dr. O'Leary, of Rochester, Minnesota, present an address on "Later Developments in the Treatment of Syphilis."

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TIPPECANOE COUNTY MEDICAL SOCIETY members met at the Lafayette Country Club, Lafayette, April twelfth, to hear Dr. William E. Lower, of the Cleveland Clinic, discuss "Endocrine Factors in Prostatic Disturbances." Attendance numbered eighty-five. The Indiana section of the American Urological Society participated in this meeting. The secretary of the Tippecanoe County Medical Society reports the diphtheria immunization campaign completed, and the committee discharged.

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TIPTON COUNTY MEDICAL SOCIETY met April fifth. Dr. J. G. Pell (dentist) spoke on "Teeth and Their Relation to Systemic Disorders."

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VANDEBURGH COUNTY MEDICAL SOCIETY met at the Protestant Deaconess Hospital, Evansville, April tenth. Dr. William Donald Davidson presented a paper on "Orthopedics" before the thirty-five physicians present. An orthopedic clinic was held.

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VIGO COUNTY MEDICAL SOCIETY met at Terre Haute, March thirteenth. Dr. H. E. Baldwin, of Danville, Illinois, talked on the "Schilling Count" to the fifty-eight attendants. At the April tenth meeting, Dr. A. M. Mendenhall, Indianapolis, talked on "Newer Things in Obstetrics" before an attendance of sixty-eight.

WABASH COUNTY MEDICAL SOCIETY met at the Wabash County Hospital, April fourth, as guests of Drs. Walker, Kidd, and Stephen. Dr. P. E. McCown, of Indianapolis, talked on "Transurethral Removal of Bladder Neck Obstructions."

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WAYNE-UNION COUNTY MEDICAL SOCIETY members met at the Richmond-Leland Hotel, Richmond, March twenty-second, for a dinner meeting. Dr. C. Anderson Aldrich, of Northwestern University Medical School, was the principal speaker, his subject being "The Treatment of Nephritis in Childhood."

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WHITLEY COUNTY MEDICAL SOCIETY held its regular April meeting at Columbia City, April tenth. Dr. A. N. Ferguson, of Fort Wayne, presented a paper on "Gall Bladder Diseases."

#### THE INDIANA STATE MEDICAL ASSOCIATION EXECUTIVE COMMITTEE

March 25, 1934.

Meeting called to order at 4:00 p.m.

Roll call showed the following present: W. H. Kennedy, M. D., chairman; H. H. Wheeler, M. D.; E. E. Padgett, M. D.; O. O. Alexander, M. D.; A. F. Weyerbacher, M. D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary.

#### Membership Report

Number of members on March 24, 1933.....	2,230
Number of members on March 24, 1934.....	2,416
Gain over last year.....	196
Number of members on March 31, 1932.....	2,501
Number of members on December 31, 1933.....	2,710

#### Actions Left Over from 1933 Session, French Lick

(1) Codification of Constitution and By-Laws. Committee working upon codification. Preliminary report of committee should be ready within the next few months.

#### 1934 Annual Session at Indianapolis

(1) Arrangements made by scientific program committee to make this an all-star scientific program. Acceptances received from George R. Minot, M. D.; Emil Novak, M. D.; F. G. Banting, M. D.; Frank H. Lahey, M. D., and Walter M. Simpson, M. D.

#### Postgraduate Course

(1) Meeting to be held at Evansville, April 26. Preliminary program for this meeting brought to the attention of the committee.

(2) Suggestion made by Dr. Kennedy that the name of this committee be changed from the Committee on Postgraduate Study to the Committee on Graduate Education. Moved by Dr. Alexander, seconded by Dr. Wheeler, that this be done.

#### Complaint against State Tuberculosis Sanatorium Practicing Medicine

The following letter was brought to the attention of the committee:

"At the recent meeting of the State Roentgenological Society last February unofficial reports were made by various members of these various institutions making x-ray plates of the chest of any individual requesting them, for one or two dollars. These plates are taken without inquiry as to the person's ability to pay, and without the knowledge of a home physician.

"We have knowledge of the vice-president of a bank going to the State Sanatorium at ——— and having chest plates of the family made at one dollar for each member; also of numerous other people, amply able to pay their own physician, doing the same thing. No questions asked as to the person's economic status."

The secretary was instructed to write to the superintendent of the Sanatorium, and ascertain the facts in regard to this complaint.



*Possibility of Holding A. M. A. Meeting in Indianapolis*

The Executive Committee feels that any formal invitation to the American Medical Association should come directly from the House of Delegates of the Indiana State Medical Association upon request of the Indianapolis Medical Society. The Committee suggests if the Indianapolis Medical Society desires to issue an invitation to the American Medical Association to hold its annual meeting in Indianapolis that it instruct its delegates to the state convention to ascertain the sentiment of the State Association concerning such invitation.

*Michigan Afflicted Child Law and Crippled Children Law*

Dr. Wheeler presented a summary of these laws to the Executive Committee. The committee ordered copies of these reports to be made and sent to each member of the committee in order that the committee may study these reports and consider the question further at its next meeting.

*Hearing on Pure Food and Drug Bill*

Report on the hearings before the Committee on Commerce of the United States Senate brought to the attention of the Committee. As there has been no definite recommendation from the American Medical Association in regard to the action that should be taken by the state and county medical societies concerning consideration of this legislation, the committee took no official action in regard to this matter.

*Recognition of Indiana Men on American Medical Association Committees*

Editorial notes and letters concerning this matter brought to the attention of the committee. Article will appear in a future issue of THE JOURNAL showing the distribution of offices in the past ten years in comparison with the number of men from each state on the American Medical Association committees.

*Indiana University and Socialized Medicine*

Bureau of Publicity reported as interested in this matter. Members of the Committee reported upon their conversation with the head of the social service department in Indianapolis that is conducted by the University.

*Diphtheria Immunization Campaign*

- (1) Report made that all the toxoid that is needed to complete the campaign is available.
- (2) Cartoon from *The Indianapolis Times*. This should be reproduced for THE JOURNAL and framed for the office.
- (3) Report on the campaign in Lake County brought to the attention of the committee.

*Group Hospitalization*

- (1) St. Paul plan. A group hospitalization plan has been started in St. Paul, Minnesota. Information upon this plan presented by the executive secretary.
- (2) Article by Harold R. Gordon, executive secretary of the Health and Accident Underwriters Conference, pointing out the socializing influence of group hospitalization plans, to appear in the April number of THE JOURNAL.
- (3) Probably definite information in regard to group hospitalization will be forthcoming from the American Medical Association, at the Cleveland meeting.

*Indigent Sick*

- (1) Clipping concerning the situation in one county brought to the attention of the committee. The County Medical Society has been doing the work for \$400.00 a month as a society. The members wish to go back to the old individual fee basis and a complaint has been registered by one of the local officials that such a system will more than double the cost of medical services.
- (2) Complete report received from Dr. Harshman in regard to the indigent sick controversy in Fort Wayne. The secretary was instructed to file this report for future reference.
- (3) Complaint received by William Book that Indiana was spending more from federal funds for medical care than New York or Illinois. The figures for the three states for the six months' period from July to December, 1933, follow: (The Illinois and New York figures do not cover hospitalization.)

	Indiana	Illinois	New York
July .....	\$139,521.82	\$90,235.27	\$61,770.67
August .....	127,578.04	78,586.42	59,915.73
September ...	111,270.08	62,763.79	55,372.92
October .....	118,219.52	65,994.43	59,087.76
November ....	115,906.31	84,797.18	67,689.01
December ....	110,179.43	83,205.17	80,298.38
	\$722,675.20	\$465,582.26	\$384,134.47

The Indiana figures, broken up into medical aid and hospitalization, follow:

	Medical Aid	Hospitalization
July .....	\$83,545.50	\$55,976.32
August .....	73,118.28	54,459.76
September .....	68,002.59	43,267.49
October .....	71,166.15	47,053.37
November .....	68,283.84	47,496.17
December .....	63,635.16	46,544.27
	\$427,751.52	\$294,797.38

*Reapportionment of Delegates to A. M. A.*

Reapportionment of delegates to the A. M. A. is to be made at the annual meeting of the American Medical Association at Cleveland upon the reported membership of the Indiana State Medical Association to the American Medical Association as of April 1, 1934. Notice to this effect has been sent to county society secretaries.

*May Day Celebration*

Bulletin in regard to May Day and Child Health Week sent to county society secretaries.

*Coming Legislature*

- (1) Letter to be sent by Dr. Padgett to the councilors urging interest of the local county medical societies in seeing that men of standing are nominated at the May primaries on both tickets.
- (2) Head of the Indiana chiropractic organization has filed for the legislature.
- (3) The committee discussed the necessity of getting members of the profession to run for the legislature, both on the Republican and Democratic tickets. The committee went on record in favor of the executive secretary making the race for the state Senate this coming legislature.
- (4) Letter of suggestion received from Dr. F. H. Jett, member of the Legislative Committee. This letter to be forwarded to Dr. O. T. Scamahorn, chairman of the state Legislative Committee.

*Shall the State Association Receive 1933 Dues During 1934?*

If a doctor pays his 1933 state dues to his county society, those dues should be sent on to the State Association. The Executive Committee feels that, because of a local rule, if a society member is obligated to pay his state dues to his local society secretary after the year is completed, these dues should be turned over to the State Association.

*File for Membership Receipts*

Upon the motion of Dr. Alexander, seconded by Dr. Padgett, the executive secretary was instructed to purchase a new eight-drawer, fireproof steel unit for the filing of membership receipts.

*State Laboratory Discontinues Tissue Diagnosis*

Statement to this effect issued by Dr. Verne K. Harvey, director of the Indiana Division of Public Health, on March 10. This statement also carried in THE JOURNAL.

*American Birth Control League Questionnaire*

Secretary instructed to make no answer to this questionnaire.

*Standardization of Indiana Hospitals*

Suggestion made that the Indiana State Medical Association standardize the hospitals in this state. Correspondence in regard to this matter was brought to the attention of the committee and the secretary was instructed to forward it to the chairman of the Committee on Medical Education and Hospitals of the State Association.

#### *Change in Date of Annual Session of State Association*

Letter received from the Indiana Roentgen Society thanking the State Association for changing the date of its meeting so that it no longer conflicts with the annual national meeting of the roentgenologists.

#### *Court Decision on Vaccination*

A clipping that appeared in the *Union City Times* was brought to the attention of the Executive Committee in regard to the ruling of the Supreme Court of Indiana which ends the controversy as to whether or not city boards of health may have the right to compel the vaccination of school pupils. Albert Stump is to get the official decision and to write an article concerning it for *THE JOURNAL*.

#### *Activities of Indiana Tuberculosis Society*

Clippings in regard to school health lectures in Indianapolis and a report of the Delaware-Blackford County Medical Society brought to the attention of the committee.

#### *Undertakers' Preference Legislation*

For a long time undertakers' bills have been given preference over physicians' bills in the settlement of estates. At the last session of the legislature a bill was passed which gives undertakers a \$300 maximum, hospitals a \$200 maximum, and physicians a \$100 maximum in certain cases. A report on this law and a full explanation of its meaning is to be prepared by Albert Stump for *THE JOURNAL*, and the suggestion was made that Dr. Shanklin comment upon it editorially.

#### *Health Survey of Indiana Health Council*

Report of Dr. Cavins upon this proposed health survey brought to the attention of the Executive Committee. Further detailed consideration of this survey to be given by the committee at its next meeting.

#### *Knox County Medical Society*

The committee expressed its appreciation of the report on the fine progress that is being made by the rejuvenated Knox County Medical Society.

#### *The Journal:*

The committee voted not to take beer advertising or any political advertisements.

An insurance column was started in the last issue of *THE JOURNAL*. The Executive Committee felt that it would be well to run this column once again.

### INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

February 22, 1934.

Present: William N. Wishard, M.D., chairman; E. D. Clark, M.D., and T. A. Hendricks, executive secretary.

Release for publication in Monday papers, March 12, "What About Our Drugs?" corrected and approved.

Copies of release, "Hoosier Basketball," sent to members of the Committee on Study of High School Athletics of the Indiana State Medical Association for approval. Approval received from members of this committee.

Radio release, Saturday, February 17, "What About Our Drugs?"

Reports on medical meetings:

January 31—Marion Kiwanis Club, Marion. "An Economical Health Program."

February 12—Gibson County Medical Society, Princeton, Ind. "Encephalitis."

February 19—Madison County Medical Society, Anderson, Ind. "Establishing a Local Bureau of Publicity."

The following letter was to be sent to the secretary of a county medical society in the state in regard to the complaint that was made to the Bureau in reference to the personal publicity of some of the members of this society:

"The enclosed clipping and letter have been referred to the Bureau of Publicity of the Indiana State Medical Association and the Bureau has in turn instructed me to refer it to the \_\_\_\_\_ County Medical Society for suitable action.

"The Bureau also wishes to call the attention of the \_\_\_\_\_ County Medical Society to at least two other instances where long articles have appeared in the \_\_\_\_\_ papers under the name of ethical physicians practicing in \_\_\_\_\_. The first one appears under the name of Dr. \_\_\_\_\_ in the \_\_\_\_\_ on October 7, 1933, and the second one appears under the name of Dr. \_\_\_\_\_ in the \_\_\_\_\_ of September 8, 1933. The Bureau has no evidence that these articles were published at the instigation of the individual physicians, but it feels that in each case the use of the names of the physicians in connection with the publication of these articles could have been averted had the society requested the newspapers not to use the names.

"The Bureau wishes to call the attention of the \_\_\_\_\_ County Medical Society to the fact that time and again the Bureau of Publicity in its reports has called the attention of the House of Delegates to the rule adopted by the Bureau against the use of the radio or newspapers by any physician in private practice for personal publicity. On more than one occasion the House of Delegates has approved these rules of the Bureau of Publicity, and hence they now have the force of law in regard to ethical matters.

"The Bureau calls attention to the Principles of Medical Ethics of the American Medical Association, which read as follows on this subject:

"It is equally unprofessional to procure patients by indirection through solicitors or agents of any kind, or by indirect advertisement, or by furnishing or inspiring newspaper or magazine comments concerning cases in which the physician has been or is concerned. All other like self-laudations defy the traditions and lower the tone of any profession and so are intolerable. The most worthy and effective advertisement possible, even for a young physician, and especially with his brother physicians, is the establishment of a well-merited reputation for professional ability and fidelity. This cannot be forced, but must be the outcome of character and conduct. . . .

"It is unprofessional to promise radical cures; to boast of cures and secret methods of treatment or remedies; to exhibit certificates of skill or of success in the treatment of diseases; or to employ any methods to gain the attention of the public for the purpose of obtaining patients."

"The Bureau of Publicity requests that this letter be brought to the attention of the \_\_\_\_\_ County Medical Society for such action as in its judgment seems proper."

Letter received from the historian of the Association which reads as follows:

"I was very much pleased to get the postcard from Dr. \_\_\_\_\_, stating that he had a picture of Dr. William Lockhart and his wife. I shall be pleased to receive these pictures.

"You might be interested to know that I had a letter from Dr. \_\_\_\_\_ of Evansville, stating that he could obtain a picture of Dr. Isaac Casselberry and Dr. Edwin Walker, who were Presidents of the State Medical Association in 1874 and 1892, respectively. Also, I can obtain a picture of Asahel Clapp, though it will probably require a visit on my part.

"I have some more interesting newspaper stuff concerning an extensive argument that Dr. Coe had with Dr. Samuel Mitchell and Dr. Livingston Dunlap of Indianapolis, along in the 1830's, which was printed in the *Indianapolis Journal*. It contains much historical data about the Indiana State Medical Association and about the education of the physicians who were then living in Indianapolis."

The attention of the Bureau was called to the annual celebration of May Day and Child Health Week. In past years the Bureau has cooperated with the state health authorities in this project, and the Bureau assured the state health authorities that it would be glad to cooperate in the same way along these lines this year.

An answer was made by the Bureau of Publicity to the questionnaire presented by the Bureau of Health and Public Instruction of the American Medical Association.

Material on diphtheria immunization campaign brought to the attention of the Bureau.

A brief outline of the history of the Bureau of Publicity was presented to the Bureau.

There being no further business, the meeting was adjourned.



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## ORIGINAL ARTICLES

### THE PROCTOLOGIST LOOKS AT FOCAL INFECTION\*

LOUIS J. HIRSCHMAN, M.D.  
DETROIT, MICH.

If the late Frank Billings did nothing else for the relief of some of the ails which have afflicted suffering humanity than his epochal work in forcefully emphasizing the importance of focal infection in the production of disease, his name and fame deserve to stand immortal in the annals of medical achievement. He was the first strong, brightly shining beacon in the murky skies of groping ignorance to throw out a sympathetic ray of hope to the stranded medical mariner and his long suffering crew.

Numerous other workers in all branches of medicine and surgery have given unstintingly of their time, thought and effort in fathoming the mysteries of focal infection. At first the efforts of most observers were directed to the search for foci in the areas connected with the mouth, throat and upper air passages. The teeth, tonsils and accessory sinuses were all tried by an unbiased jury and found guilty of harboring undesirable citizens and public enemies. It was only after a considerable period of time that due thought and consideration were given to the urinary and intestinal systems as possible sources of focal infection. The urologist has pointed out to us several important foci, particularly in the kidneys and prostate.

Those of us who have had our attention directed especially to the study of the intestinal tract have long been struck with the similarity exhibited by the symptoms which were formerly designated as "autointoxication" to those symptoms which we now better understand when designated as of focal infective origin.

We now know that patients suffering from grave infective conditions involving any of the important organs of the body may trace the beginning of such a diseased condition to an infective process in a comparatively remote organ. Even suppurative bone conditions, such as osteomyelitis, have been found not infrequently to be due not to trauma but

to have originated in a distant focus. The heart and the kidneys are not infrequently disabled and diseased as a result of focal infection, but perhaps more frequently than any other symptoms reported are those painful conditions designated as arthritis, neuritis and myositis frequently caused by focal infection.

We physicians formerly discussed attacks of biliousness, indigestion, dyspepsia, rheumatism, arthritis, neuritis, autointoxication and reflex pains. We also were wont to discuss and consider disease entities such as muscular rheumatism, sciatica, lumbago and coccygodynia and the various neuralgias. We can remember when the appendix and the gall bladder were removed many times in both sexes and our female patients were deprived of their ovaries in bygone generations with the hope of curing some of those conditions which, in those days, we thought were reflexes originating in the organs condemned to sacrifice.

We have learned, however, since that period that many symptoms of a more or less general type are due to infections which originate in organs lined by mucous membrane and usually containing lymphoid tissue located in parts of the body quite remote from the area in which these symptoms are usually manifested. Careful examination of all known sources of focal infection have in many cases led to the discovery of definite foci from which these infections originated.

#### CATHARTICS AND ENEMAS

Intestinal indigestion and so-called autointoxication have long been treated by the profession by the administration of cathartics and enemas with some restriction and regulation of the patient's diet.

This has been good treatment in not a few of these patients, but in others only transitory amelioration of symptoms has taken place. Satisfactory relief of symptoms of a permanent character has not been accomplished. Symptoms such as neuralgia, muscular pains, dizziness, nausea, headaches, blurring of the eyes, fatigue and lack of ambition, undefined aches and pains, constipation, bad breath, loss of appetite, abdominal distress, rise of temperature at various times, certain skin eruptions, and insomnia with bad dreams, may all be due to focal infection.

Any interference with the normal physiological function of the intestinal tract and particularly with the elimination of waste products will soon

\* Presented at the annual session of the Indiana State Medical Association at French Lick, September, 1933.

manifest itself by symptoms similar to the above. The whole colon is a vast reservoir of potential infection. Anything which interferes with the normal, smooth peristaltic flow and makes for prolonged retention of material no longer required by the organism will make for absorption of material of an infective or toxic nature. Ulcers, sinuses and abscesses located in any portion of the colon may be sources of infection.

#### CRYPTS OF MORGAGNI

As already stated, the symptoms of autointoxication have been generally recognized as some disordered condition of the intestinal canal, and under proper regional and dietary therapy many cases have responded to treatment. What has not been generally recognized, however, is the fact that there is an area at the terminal portion of the intestinal tract that is a ripe and fertile source of focal infection. Here are the crypts of Morgagni, which are located at the junction of the anal canal and the rectum. These crypts normally secrete a thick mucus, which serves as a lubricant to the feces just before their extrusion from the anal canal. They vary from three to twelve in number and are recognized as openings in the mucous membrane, usually crowned by small papillae. When diseased, these crypts are red and the papillae are pinkish white, enlarged and elongated, sometimes polypoid.

On examination through the anoscope with a right-angled probe or hook, one can readily identify these crypts. Often pus can be demonstrated in the crypts, and not infrequently a sinus or a blind internal fistula will be found leading from a diseased crypt. These sinuses will vary in length from one-half inch to two inches (1 to 5 cm.) and extend usually in a radial direction from the crypts.

The crypts are large and more numerous and of greater capacity than tonsillar crypts. They frequently may not cause any local symptoms, but when they do, the symptoms are quite characteristic. Because the openings or mouths of the crypts are directed upward in a direction opposed to the fecal current, it is easy to see that irritating particles, such as bran, bits of bone, eggshell, oyster shell, vegetable seeds and skins, toothbrush bristles and other bits of foreign material are forced into the crypts during the expulsion of fecal matter. When material such as this becomes lodged in a crypt, it acts as a foreign body irritant and causes ulceration followed by suppuration and absorption. It is with difficulty that any of these particles are dislodged, and they usually remain and either disintegrate or irritate the crypts and traumatize them, as has been mentioned. What a fertile source of infection there is in this natural incubator! Anal cryptitis is probably the most frequently overlooked source of focal infection that is present in the human body today.

It is a very simple matter to include in the examination of the patient the anoscopic examination

previously mentioned. The proctologist or general practitioner who indulges in this as a routine will be rewarded not infrequently by being the first to discover that an anal cryptitis or a perianal sinus is the source of infection that has produced symptoms such as are illustrated by some cases which will be mentioned later.

The treatment of symptoms caused by absorption of the products of decomposition or fermentation in the colon is accomplished by well-tried methods used for the relief of functional or in some cases obstructive constipation.

#### COLONIC LAVAGE

Colonic lavage has been sadly abused in this connection. Some members of our profession have gone so far amuck in the prescribing and administration of colonic irrigations that they have made the public "colon conscious." Colonic lavage has been heralded by physicians, nurses, physiotherapists, hydrotherapists, various cultists and bath-house attendants as the great panacea for all the ills to which human flesh is heir.

In the preliminary treatment of patients suffering from the effects of colonic stasis or infection, irrigation of the colon with mild non-irritating solutions may be advised by the medical attendant. This is purely a preliminary stage of the treatment and should not degenerate into a daily, monthly, or perennial habit.

In connection with the treatment of patients suffering from symptoms which have been traced to infective anal cryptitis, we find they fall into three classes:

1. The patient whose symptoms are of recent origin, who responds usually to eradication of the crypts either by cauterization, sinusectomy, fistulectomy, or cryptectomy.
2. This class is smaller in size than the preceding and responds to correction of the intestinal function and the administration of autogenous vaccine.
3. This class, which is by far the largest group, comprises those whose symptoms are of a chronic character and require both the surgical removal of infected crypts and sinuses as well as a more or less prolonged period of autogenous vaccine therapy.

#### CASE REPORTS

To illustrate the importance of keeping focal infection of ano-rectal or colonic origin in mind, the following brief case synopsis will be of assistance:

Case 1. Dr. H. suffered from high blood pressure and arthritis, involving particularly the right hand, for a number of years. He had had dental attention, and the tonsils had been removed, as possible foci of infection, without much relief. He consulted me because of a burning sensation in the region of the anus. Anoscopic examination disclosed an infected anal crypt in the left anterior quadrant into which a small abscess, beyond the margin, was draining. Pus could be expressed



from this on slight pressure. This was opened under local anesthesia, and within forty-eight hours the patient was able to close his hand with comfort, something he had not been able to do for two years previously. Recovery was prompt and satisfactory, and all symptoms of arthritis have disappeared.

Case 2. Mrs. H., age 29, had been a semi-invalid for about a year. Headaches, evening elevation of temperature and gastro-intestinal distress dated back to the time when she had an ischiorectal abscess opened by her family physician, a year before. This had apparently healed, but she still noticed pus appearing from the rectum with the stool. Examination disclosed an internal sinus opening into the left posterolateral quadrant. Stereoscopic roentgenograms, after injection with bismuth, showed a sinus four inches (10 cm.) in extent. This was opened radically under local anesthesia. With the healing of the wound, all the symptoms disappeared.

Case 3. Dr. X., a busy specialist who, while advising others to recreate, to pursue diversion and to diet carefully, does none of these things himself, noticed that he appeared to be slowing up mentally as well as physically. He had sleepless nights; the bowels were somewhat constipated and he complained of urinary disturbance, loss of appetite and dizziness. He noticed the appearance of an erythematous eruption at various places on his body. He experienced some relief from all the symptoms after alkaline enemas and saline cathartics. He had his tonsils removed and sinuses examined with negative results. He consulted me for examination and treatment for hemorrhoids, which he knew he had. Examination demonstrated the presence of chronic internal hemorrhoids and also deep infected Morgagnian crypts. The surrounding mucous membrane was congested and red, and purulent secretion could be demonstrated in the crypts. Excision and drainage of the crypts under local anesthesia soon relieved all the symptoms.

Case 4. Mr. M., age 29, complained of recurrent attacks of appendicitis and pain in the region of the coccyx. He had had surgical attention by another surgeon for the removal of his appendix five months before. At that time he asked the surgeon to investigate the condition of his coccyx, as he had been having trouble with it for several years. Roentgenograms were made, which demonstrated some lateral deviation but no bone change. Nothing was done to the coccyx at the time of the appendix operation, and the confinement to bed incident to this aggravated the coccygeal symptoms.

He was referred to me because of the trouble with the coccyx. Examination revealed marked anal crypt infection of long standing. The coccyx appeared normal but the slightest movement or pressure of the sacrococcygeal joint caused intense pain. There was no evidence of arthritis anywhere else. A diagnosis of sacrococcygeal arthritis was made, and the anal crypts were believed

to be the foci of infection. These were excised and drained under local anesthesia and the arthritis quickly disappeared. In this case, the excision of the coccyx was seriously considered by both the patient and the other surgeon whom he had consulted, but the excision of the crypts removed the source of infection and cured the condition.

Case 5. Mrs. H. J., age 54, has had a history of several years of constipation. She had a hemorrhoidectomy nineteen years ago and again four years ago; gall bladder drained and perineum repaired six years ago. Present symptoms consist of constipation, dizziness and joint pains, particularly severe at the sacrococcygeal joint. A diagnosis of coccygodynia was made and removal of the coccyx considered by another surgeon. Examination revealed two small anal ulcers at the site of the anal crypts. These were cauterized and advice given regarding the relief of her constipation, with the result that the symptoms had entirely disappeared and general health improved and the coccygeal pain disappeared. She is able to sit comfortably because she still retains her coccyx.

I believe a little more attention to and study of this symptom called "coccygodynia" will illustrate the fact that it is often caused by a true arthritis of the sacrococcygeal joint, and many cases in which the coccyx has been removed for the relief of this symptom might have been entirely relieved by the removal of the focus of infection, which, as has been demonstrated in the patients cited and in others was located in a diseased and infected anal crypt.

Case 6. Mr. J. F., engineer, age 50; general health has been very good until one year ago when he complained of occasional attacks of irritation around the anal canal; also attacks of insomnia, and neuritis of the left arm. He is a man who has been meticulous about regular physical examinations and has always had a clean bill of health.

Examination showed a single left lateral hemorrhoid with a deep, angry-looking crypt. The hemorrhoid was removed and the crypt incised and drained. The wound healed in less than a week and the neuritis disappeared before the wound was healed. In this case no vaccine was necessary, as the surgical drainage eradicated the focus and he has remained well.

Case 7. Mrs. H. C., age 45, mother of four children, from 14 to 22 years of age. All pregnancies were normal, all children healthy. History excellent except for occasional attacks of "lagrippe." This was accompanied by pain in the left shoulder, running down to the left hand, and swelling, with inability to close same. Also some pain in the lumbar region, running down the right hip and thigh. The patient consulted us on account of rectal bleeding with occasional muco-purulent discharge.

Examination revealed a rectocele and internal prolapsing hemorrhoids; a marked cryptitis with hypertrophic papillitis and posterior anal ulcer, resulting from the breaking down of a posterior

crypt. Patient was operated upon under caudal nupercaine anesthesia. The rectocele was repaired and the hemorrhoids, crypts and ulcers were excised and drained. The second morning following the operation, the patient informed her husband with great joy that she was able to close her hand for the first time in months, and that the pain in her hip and leg had disappeared. There has been no return up to the present date.

Case 8. Mr. W. H. V., age 60, probation officer. Work is very arduous and has kept the patient under constant mental and physical fatigue. A few months ago developed a myocarditis which prevented him from following his occupation. His medical attendants searched for foci of infection in the upper air passages and found nothing. In the course of his treatment, the patient complained of pain and some bleeding on defecation and was referred to us. Our examination disclosed internal hemorrhoids, chronic cryptitis and posterior ulcer. He was operated upon and the pathology removed.

Within two weeks the patient was able to be out of bed and to walk around without dyspnea; within three months he resumed his occupation and has remained there ever since, a period of four years. His cardiac condition has improved to such a point that his physician has practically dismissed him from observation.

In the second class, we find a small group; but when cases respond to vaccine therapy alone, the results are striking, as the following will illustrate:

Case 9. Mrs. H. T. C., age 51, a very active lady whose activities have been retarded for several months because of a deltoid neuritis. This deltoid neuritis antedated a small, simple, direct fistula of a few weeks' duration. She consulted us for relief of the fistula, and the story of the shoulder lameness was elicited at that time. The fistula was excised under caudal anesthesia and forty-eight hours later the patient volunteered the information that she thought that the "rest in bed" was just what she needed as her shoulder lameness had disappeared. Eighteen months have elapsed and the patient has never had a recurrence of this condition.

Case 10. Mrs. H. B. S., age 37. Chief complaint, colonic dysfunction. Had consulted and been examined by many physicians in many cities and has had the diagnoses of chronic ulcerative colitis, amoebic dysentery, *Brucella abortus* infection and hyperthyroidism. Sixteen years ago had a laparotomy, and as far as she knows only the appendix was removed. Examination of mouth revealed a devitalized first molar tooth which was extracted, but no other infective foci were discovered.

The patient came with the history of griping abdominal pains with several bowel movements daily, occasionally containing small amounts of blood. Anoscopic examination revealed an active cryptitis with small internal hemorrhoids. Proctoscopic examination disclosed a moderately congested mu-

cous membrane but no ulcerations or scars from previous ulcerations could be discovered. Fluoroscopic examination after a barium enema disclosed some omental fixation of the transverse colon to the old scar. Cultures of the discharge from the infected anal crypts disclosed a marked infection with both hemolytic and non-hemolytic streptococci. A vaccine was prepared and administered over a period of six weeks, after which time the patient reported herself as entirely well. She disappeared from observation for six months, when she again reported, merely to state that she was in better health than she was since her operation sixteen years before.

In this case, the crypts were not drained. The response to vaccine therapy and the removal of the trauma by the elimination from the diet of harsh and irritating roughage produced the desired result.

The third class of cases in whom relief may be expected from surgical removal of the original focus followed by the administration of the proper vaccine in order to restore the patient's resistance, is a large class. It is in this class that the most brilliant and dramatic results are achieved, as in the following illustrative cases:

Case 11. Miss P. W., age 36, has a pain in the left hip, running from the pelvis to the foot, which is worse when she stands and walks. Has had a tonsillectomy and sinus drainage with the idea of eliminating foci. Is constipated and, on account of pain following defecation, consulted us for relief.

Examination disclosed tenderness along the sciatic nerve; hemorrhoids, internal and external, and an active ulcerative cryptitis and papillitis. The crypts were cultured and many colonies of hemolytic and non-hemolytic streptococci and viridans were noted. A pooled vaccine was made from these organisms and administered over a period of four months following surgical removal of the crypts, papillae and hemorrhoids.

A recent communication from the patient states that she is again restored to complete health and is entirely free from her previous symptoms.

Case 12. Mr. J. M., age 18, had been treated for a period of three years by various physicians in various parts of the country for ulcerative colitis. Has had various types of dietary and hydrotherapeutic treatment without success.

A cecostomy was performed with immediate improvement of the patient's symptoms for a period of two years. After a period of three months with normal stools, the cecostomy was closed. An immediate flare-up occurred with the return of all of the former symptoms of ulcerative colitis. The cecostomy was reopened, but in spite of a resumption of irrigations and careful attention to his dietary, he did not improve.

At this time cultures were made from anal crypts which were very inflamed and a mixed vaccine prepared from these cultures. This contained *staphylococcus aureus* and hemolytic and non-hemo-



lytic streptococci as well as the viridans. Under continuous vaccine therapy, checked by periodic complement fixation tests, his symptoms have gradually improved, so that in the past year he has gained from eighty-eight to one hundred and thirty-two pounds and has a normal stool daily, occasionally ever other day.

One could go on indefinitely reporting cases like these, but it is not necessary. There is no question that there are many patients suffering from symptoms of focal infection who, after some of the foci are removed, have an apparent recurrence of symptoms after a period of temporary relief. These patients should have a careful investigation of the intestinal tract. The relief of crypt infection will cure these cases. There are many others, however, in which there are two and more focal sites, which must all be taken into account when considering remedial measures necessary for the relief of the patient's symptoms.

Quite frequently patients have been seen with bad teeth, infected tonsils, and infected crypts. There have been others, however, who have submitted to a tonsillectomy, extraction of teeth with apical abscesses, and who have also submitted to the removal of an innocent appendix, all in the hope of removing the infective focus.

Imagine the feelings of the patient when symptoms, relieved for a while, return, only to be permanently banished by a comparatively minor anal operation under local anesthesia. It is sincerely hoped that indiscriminate removal of anal papillae and Morgagnian crypts discovered on anoscopic examination will not be indulged in by enthusiastic investigators.

This is the sequel of the evidence that an unsuspected organ is the focus of infection. However, all patients suffering from symptoms such as I have mentioned should at least be given an anorectal examination to exclude, if possible, all foci of infection in the terminal portion of the intestinal canal.

#### OPERATIVE PROCEDURE

The operative procedure for the removal of infected crypts and papillae is so simple under local anesthesia that it can be carried out without special training in proctology by anyone who is accustomed to doing surgical work under local anesthesia.

The preparation for the operation is as follows:

The patient is given a sodium bicarbonate enema the night before operation and again the following morning. Three grains of oral sodium or of sodium amytal is administered twelve hours before and again two hours before the hour of operation. He is placed on the operating table in the left Sims position, and the skin surfaces around the anus are washed with alcohol, followed with tincture of merthiolate. The anesthetic solution used is nupercaine 1:500, injected into the caudal canal, or if one prefers an infiltration anesthesia,

nupercaine 1:1000 is used. A large hypodermic syringe is filled with this solution, and the sphincter is anesthetized by blocking the lesser sphincteric nerves through a puncture one-half inch behind the posterior commissure. The hypodermic needle used is sharp, flexible and of fine caliber so that it can be curved easily. After the sphincteric nerves are blocked, the injection is carried completely around the anal circumference, the solution always should be underneath the skin, and never injected into the integument.

In three or four minutes the sphincter is completely relaxed. The anal canal and also the rectum can be completely exposed by eversion by traction with triangular forceps, which are placed on the skin margin at the four points of the compass. This brings the infected crypts and papillae into view, when they are excised with curved scissors. These incisions are made in a direction parallel to the radiating folds, so that any resulting scars run in the direction of the anal folds, or in the long axis of the anal canal.

A wire probe bent at a right angle, inserted into the mouth of a crypt, will render the excision very easy. After the crypts and papillae are excised, a compression dressing is applied and held in place by a T-bandage. Bleeding sufficient to require ligature is rarely encountered. The patient can be up and around as soon after the operation as he desires. It is never necessary to confine him to bed for longer than a day or so.

Liquid petrolatum or mineral oil is administered in 1- or 2-ounce doses every night, and the patient is placed on a low residue soft diet. There is no objection to daily evacuation. The only after-care required is the regulation of the patient's diet and evacuations, with such local application to the healing surfaces as may be required in individual cases.

Any other anorectal operation for which indications are found, such as removal of polyps, hemorrhoids, fistulas and small fissures, can be performed under the same anesthesia at the same time.

There is one thing to be said about the excision of anal crypts for the relief of focal infection. No organ is removed and no damage of any kind is done to the patient or his physical welfare by the operation. This cannot be said of operations on any other foci, such as the removal of teeth, sinuses, tonsils or the abdominal organs.

#### VACCINE TREATMENT

Inasmuch as the bacterial study and vaccine treatment of these patients is predicated on a knowledge of the technique involved in the diagnosis as well as the treatment, a brief summary of the methods followed by us will not be out of place. Our technique has been developed by Dr. S. W. Wallace, Director of Laboratory Service at the Charles Godwin Jennings Hospital.

In securing material for culture, the patient is placed in the same position as for operation, and through an anoscope, the diseased crypts, ulcers

and sinuses or other lesions are exposed. They are cleansed and then a platinum wire, of the same shape as the silver probe used in the examination of crypts, is employed. This is inserted into the crypt and the crypt surface scraped so that a small amount of blood will flow. Broth culture tubes are inoculated with this and sent for bacterial study.

In studying foci of infection the material for culture is diluted in plain broth and then transplanted to blood agar plates. After twenty-four to forty-eight hours, separate colonies of the various organisms present are fished and transplanted to a nutrient broth. These organisms are further classified as to morphology, sugar fermentation, etc. We also further test these organisms for antigen or toxin-producing properties.

After obtaining a good growth on broth the culture is centrifuged, the supernatant broth decanted and the residue put into suspension in saline. This suspension is diluted to a given strength found by experience to give the desired concentration.

We then run a complement fixation on 6 to 10 sera, using this suspension of the organisms as the antigen. The suspension showing the greatest degree of inhibition of hemolysis is considered the most active antigen or toxin-producing organism, and we feel leads to the primary source or sources of infection.

Colon bacilli will overgrow streptococci and other organisms, and in order to eliminate the bacillus coli the material for culture is first incubated twenty-four hours in a one per cent soda bicarbonate solution to kill off these colon bacilli; then portions of this are transferred to the usual culture media.

Basically, the principle of complement fixation is the same as that of the Wassermann reaction, but the test as we use it to determine hypersensitivity to bacterial antigens is considerably modified.

In doing the test we depend on the complement present in the human blood being tested instead of inactivating the serum and adding a standardized guinea pig complement. In fact, one of the points of value in the test is to give us some idea of the complementary titre of the specimen being tested.

The antigen used is a standardized aqueous extract of the organisms. It takes from two weeks to a month to prepare this extract. A one-half of one per cent suspension of washed sheep cells sensitized with antishoop amboceptor is used.

We are using about thirty different antigens. The setup is as follows:

Each setup has its own control.

For each antigen there are three tubes containing .01, .02, and .04 c.c. of serum, respectively. To the control is added saline solution. To the others the standardized antigen is added. This setup is incubated in a water bath at 37 degrees for forty-five minutes.

The one-half of one per cent suspension of sensi-

tized sheep cells is then added and the setup is returned to the water bath. This is watched, and when all these control tubes have cleared (completely hemolysed) the setup is taken out of the water bath and the degree of inhibition of hemolysis noted. The greater the degree of inhibition of hemolysis the more strongly positive is the test.

A positive complement fixation, i. e., inhibition of hemolysis, is indicative of an abnormal abundance of antibody in the blood serum and in or on the cells, i. e., sensitizing the cells. According to the present conception, desensitization depends on the principle of desensitizing the cells; that is, on producing slight but frequent repeated allergic reaction by the administration of the allergen or vaccine, and thereby exhausting or removing antibody from the cells.

If an excessive amount of allergen or vaccine is given, the presence of the excess allergen above that amount necessary to neutralize the antibody then stimulates further antibody formation, defeating the purpose of the administration of the allergen.

The patient is made worse and the degree of sensitivity is increased.

This can be demonstrated by the complement fixation test and, in our experience, the dose of vaccine has to be kept very low.

In making up our vaccine we use the stock organisms to which we find the patient sensitive, together with his autogenous organisms. These are used in concentrations of 500 to 2000 organisms per c.c.

When a vaccine suited to the individual is prepared, .2 c.c. is administered subcutaneously, and the patient is watched for any symptoms of allergic reaction. This dose is then repeated the second day, then raised to .25 c.c. and administered every alternate day for a period bearing with the individual reaction and progress of the case. The dosage is gradually raised to a maximum of .5 c.c. At the end of varying periods, according to the individual case, ranging from four to eight weeks, complement fixation tests are again made. In some cases it is necessary to change the composition of the vaccine and in other cases to increase or decrease the dosage at intervals of injection.

As it has been demonstrated that focal infection does originate in this part of the body, whether there are other foci or not, the patient should be given the benefit of this information, and the removal of diseased crypts carried out as previously indicated. The gratitude of patients relieved after this procedure, particularly those who have undergone various other treatments without having secured that relief, will amply reward the practitioner of medicine who will follow this method.

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## DISCUSSION

A. B. GRAHAM, M. D., Indianapolis: It has been my privilege to have known our guest speaker, Dr.



Hirschman, for many years. I have no hesitancy in saying that it is my personal opinion he has done more for the advancement of proctology in this country than any man I know. His extensive experience in this work is evidenced by this thorough and scholarly presentation.

I will not attempt to discuss the paper. All I can say is that I am heartily in accord with what Dr. Hirschman has said this afternoon.

H. H. WHEELER, M. D., Indianapolis: I believe that we must learn to think of infections of the rectum and of the lower colon, the same as we do of the upper air passages. These primary infections in the crypts of Morgagni that Dr. Hirschman has spoken of become general systemic infections which are carried through the lymphatics to the surrounding tissues and distant organs. We may have the appendix and gall bladder diseases secondary to a foci of infection in the anal canal and lower colon, and removal of the appendix and gall bladder will not relieve the patient. Is it not logical that if you have a metastasis of cancer from primary cancer of the recto-sigmoid area to the liver that the infection from one of these crypts likewise might infect the gall bladder? Or an infection of these crypts causing a peri-anal abscess and fistula could produce a general systemic infection or involve some one of the vital organs, as the heart, cardio-vascular system, or cause thyroid disturbance the same as tonsillar or periapical infections.

I was asked a moment ago where these crypts are. They are in the pectinate line, at the junction of the mucous membrane and the skin. It is the union of the ectoderm and entoderm, the two primary membranes that form the skin and mucous membrane. You have the portal circulation of blood supply and lymphatics above the line, and the systemic circulation below, which reaches the heart through the vena cava. Infections of these crypts is the beginning of abscess and fistula in 98 per cent of cases. Whenever you have fistula you have a source of infection. The reason you do not cure your patient of fistula at your first, second, or third operation is because you do not find the internal opening in these crypts that Dr. Hirschman has been telling you about. The crypt is the point of primary infection, and unless this opening is found and eradicated in the operative procedures, the fistula is sure to recur sooner or later.

## DIFFERENTIAL DIAGNOSIS OF BILIARY DISEASES\*

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INDIANAPOLIS

The purpose of this paper is to review briefly the more common biliary diseases that lead to icterus, enlargement of the liver, and gall bladder

symptoms. The diseases more often encountered by the general practitioner are those which have been included, although numerous other conditions are equally important once they present themselves for differential study.

### DIAGNOSTIC METHODS

In the diagnosis of gall bladder and liver diseases, studies should be as extensive as possible to arrive at a reasonable conclusion. The most important of all studies is a carefully taken, detailed history of onset, duration, and course. General physical examination is of special value, since it may lead to discovery of some other systemic trouble that may bear some relation to the condition. One should note particularly the size, consistency and smoothness of the liver, tenderness or a palpable mass in the gall bladder region, disturbed collateral circulation, edema, and accumulation of ascites.

*Jaundice.* No symptom in clinical medicine commands greater interest than a careful analysis of jaundice. Bile is secreted by the liver cells. It consists of bile pigments, bile salts, and cholesterol. The origin of bile is not well understood, although Mann<sup>17</sup> and his co-workers demonstrated that bile may be formed outside the liver, and McNee<sup>18</sup> thinks that the reticulo-endothelial system possibly produces it. Since the Kupffer cells are a part of this system, some bile may be formed by them. Van den Bergh's<sup>19</sup> studies have revealed two types of bile pigment, one giving the direct reaction of obstructive jaundice, the other the indirect or delayed reaction of non-obstructive jaundice. Many years ago biliary obstruction was thought to be the cause of jaundice. In Buchan's *Medicine*<sup>5</sup> published in 1783, he states, "The immediate cause of the jaundice is an obstruction of the bile." Then he names several "remote or occasional causes" as "bites of poisonous animals," "bilious or hysteric colic," "violent passions," "strong purges," "vomits," "obstinate agues," "several kinds of fevers," "stoppage of customary evacuations such as the menses," and incomplete purging of "the meconium." Since Buchan's time various new ideas have led to our present notion, that jaundice is of four types, as follows: (1) obstructive, (2) hemolytic, (3) toxic and infective, and (4) dissociated. Obstructive jaundice is caused by complete or partial interception of bile flow through bile ducts. Hemolytic jaundice results from such rapid blood destruction that the liver cannot excrete the excess. Toxic and infective jaundice arises from injury of liver cells. Dissociated jaundice is that type in which a disproportion exists between bile salts and bile pigments. Its cause is hemolytic or toxic; however, its detection is too difficult for diagnosis in routine general practice.

Blood changes in jaundice are numerous. Those of greatest diagnostic import are concerned with blood coagulation, bile in the serum, and leucocyte changes. Fibrinogen, which is produced by the

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liver, is definitely lowered, causing delay in blood coagulation. There are two valuable serum tests for bile. The Van den Bergh<sup>31</sup> test not only differentiates obstructive from non-obstructive jaundice, but also is a quantitative test for serum bilirubin. The icteric index test of Meulengracht,<sup>15</sup> also described by Alice Bernheim,<sup>2</sup> has proved very valuable in quantitative bilirubin studies. Leucocytosis helps to differentiate infectious from non-infectious diseases.

Clinical signs of jaundice are well known. Briefly narrated, they are: yellow discoloration of the skin, sclerae and mucous membranes, bile in the urine, and light or clay-colored stools.

Roentgen signs in liver and gall bladder diagnosis are displayed chiefly by the Graham-Cole<sup>6 12 13 14</sup> cholecystogram. No advance in x-ray studies has been more gratifying to the medical profession than this test has been. It has limitations in cases of jaundice, because if the liver cannot excrete bile, it cannot excrete the gall bladder dye. Its use in such cases should be postponed until jaundice has subsided. Liver visualization by thorium dioxide or Thorotrast<sup>25 33</sup> is too recent and its resultant dangers too little understood to recommend it at present.

Liver function cannot be discussed at this time. During the past decade, many tests of liver function have been studied. Those which furnish valuable corroborative evidence are: (1) the bromsulphthalein test, introduced by Rosenthal and White<sup>22</sup>, (2) the rose bengal test introduced by Kerr and his associates<sup>7 8 9</sup>, (3) the galactose test of Bauer<sup>1 26 27</sup> and (4) cholesterol partition of blood as described by Bloor and Knudson<sup>3</sup> and applied to liver diagnosis by Epstein<sup>10 11</sup>. Although the bromsulphthalein test occasionally may cause an undesirable reaction, it still is considered the most accurate and dependable liver function test for liver degeneration. The rose bengal test has a similar use, and in the course of time may assume a greater reputation. The galactose test and cholesterol studies give a better index of disturbed liver function due to infection and toxemia.

#### INFECTIVE DISEASES

Two types of infective processes occur in clinical study of liver diseases. One results in inflammation and soreness of the gall bladder; the other results in liver enlargement and various degrees of jaundice. Symptoms common to the infective diseases are gastro-intestinal distress, anorexia, and sometimes nausea and vomiting; fever, mild or severe; toxemia with lassitude or generalized aching; leucocytosis varying with the degree of toxemia; febrile or toxic albuminuria; and if jaundice is present, bile in the urine and clay-colored stools.

*Cholecystitis*—Gall bladder inflammation results in pain that localizes in the epigastrium, right hypochondrium, and sometimes in the right shoulder. The pain is not excruciating as in gall

stone colic. There is tenderness over the gall bladder, but the liver is not tender. There is no jaundice unless the inflammation spreads into the bile ducts. Suppurative cholecystitis and phlegmon differ from usual cholecystitis by more severe toxemia and marked local signs.

Liver enlargement and jaundice accompany a number of inflammatory processes. *Catarrhal jaundice* is a mild inflammatory condition of the bile ducts presenting the usual infective symptoms, but of mild intensity. It results in slight enlargement of the liver and in an obstructive type of jaundice which lasts three weeks or longer. It is a painless jaundice. Patients are never very ill and the prognosis is good. *Weil's disease*<sup>32</sup> is similar to catarrhal jaundice, but differs from it in that there are marked symptoms of toxemia, with a more severe onset, and a slower convalescence. The *spirochoeta icterohaemorrhagiae*<sup>15</sup> may be recovered from the duodenal contents, blood and urine. *Suppurative cholangitis* with onset much like Weil's disease, begins with sudden severe toxemia, pain in the liver, higher leucocyte count, enlarged spleen, and runs a progressive fatal course within three or four weeks. The jaundice is progressive and septicemia severe. *Acute non-suppurative hepatitis* is a mild infection. The liver enlarges, and there is a low grade fever. Jaundice is seldom very marked, and convalescence is slow. *Liver abscesses* may be suppurative or amebic. *Suppurative* abscesses are associated with symptoms of moderate or severe septicopyemia, with chills, intermittent fever, and sweating. The jaundice at first is mild, later progressively intense. The liver is painful. The abdomen often enlarges, but ascites is uncommon. *Amebic* abscess is less toxic. Patients may have recurrent paroxysms of toxemia, but they are relatively mild. The liver enlarges greatly, the abdomen is distended, ascites is rare, jaundice is not common. A history of dysentery and the finding of amoeba histolytica in rectal mucus reveals the nature of the trouble.

An enlarged liver due to acute infection does not become nodular. The gall bladder is never tender, except when it is the seat of inflammation. It may be palpable when the cystic or common ducts are blocked. Liver function tests that are most valuable in infectious processes are the galactose test of Bauer and the cholesterol partition of blood serum. Van den Bergh's qualitative test will reveal the nature of the jaundice, and the quantitative and icteric index tests will indicate its extent and progression.

#### GALL STONES

Gall stones may or may not cause colic. Stones may occur in the gall bladder, cystic duct, common bile duct, or hepatic ducts. Stones in the gall bladder result in dyspeptic indigestion, lassitude, and recurrent attacks of acute cholecystitis. Stone in the cystic duct results in a paroxysm of pain, more or less severe, intense gastro-intestinal symp-



toms, a large, often tender gall bladder, and frequently severe symptoms of cholecystitis. Stone in the common duct produces typical gall bladder colic with severe gall bladder type of pain and marked gastric symptoms, followed by cholangitis, and obstructive jaundice. If the stone passes, symptoms soon subside; if not, pain, jaundice, cholangitis and gastric symptoms are recurrent. Stone or stones in the hepatic ducts are secondary to other calculi, usually in the common duct. They often are not painful, but may cause colic. Jaundice becomes intense and progressive and cholangitis or even hepatitis may result. The jaundice may be painless.

Toxemia resulting from stones is dependent upon jaundice and the resulting cholangitis or cholecystitis. The cholecystogram is the most helpful method of laboratory diagnosis, but is not satisfactory during the period of jaundice. If liver enlargement occurs, its border is smooth and its origin is due to distension of biliary ducts and inflammatory reaction. Usually there is tenderness over the gall bladder and common bile duct during the period of colic and inflammation. Liver function frequently suffers during the attacks of complicating cholangitis and hepatic swelling. If liver damage is great, scar tissue is formed, resulting in secondary cirrhosis. After such damage has been done, gall bladder surgery naturally presents greater hazards than if operation is done early in the case. Liver function tests should be run routinely, in cases of long standing cholelithiasis, before surgery is attempted. The bromsulphthalein and rose bengal tests are the most dependable ones under these circumstances; but, if recent cholangitis and hepatitis are in question, Epstein's studies<sup>10-12</sup> would indicate that cholesterol partition of blood serum is more useful, and Shay's<sup>26-27</sup> work would commend the galactose test for such acute dysfunction.

#### DEGENERATIVE DISEASES

Degeneration of the liver may be acute or chronic.

Acute degeneration is best illustrated by acute yellow atrophy which Rolleston<sup>24</sup> considers "a symptom complex due to various causes." Most common among the causes are pregnancy, chloroform, arsenic, phosphorus, trinitrotoluene, anilin dyes, cinchophen, and food poisons. The early symptoms are like the onset of catarrhal jaundice or Weil's disease. After two or five days there is a sudden change for the worse, gastric symptoms are uncontrollable, dehydration becomes marked, jaundice deepens and steadily progresses, prostration advances, somnolence, delirium and stupor indicate severe toxemia, which later develops into coma, sometimes with convulsions. Blood coagulation becomes prolonged, and hemorrhages from mucous membranes and subcutaneous purpura result. If the liver is palpable at first, it soon decreases greatly in size. Leucocytosis is moderate, and urinary studies indicate increase in

ammonia, decrease in urea, and an increased quantity of leucin and tyrosin. Liver function tests in this disorder may be of interest, but rarely are of help.

Chronic degeneration is best illustrated by the cirrhoses. There are two types of cirrhosis—portal, atrophic or Laennec's cirrhosis, and biliary, hypertrophic or Henocho's cirrhosis.

Portal cirrhosis does not closely resemble liver or gall bladder diseases previously mentioned. The early symptoms consist of periodic attacks of indigestion, loss of appetite, weakness, gaseous distension, a "muddy" color of the skin, and usually a palpable liver. During this period the diagnosis is almost impossible, although a study of liver function should offer the greatest aid obtainable. Later all symptoms become more marked, the liver may become firm and nodular, collateral venous enlargement indicates intercepted portal circulation, occasional hemorrhages occur, and ascites results requiring repeated paracentesis. Death eventually supervenes in coma of the so-called "uremic type."

Biliary cirrhosis is due to infection and toxemia. It is a progressive disease with periodic acute exacerbations, and a progressive jaundice. In its beginning it closely resembles catarrhal jaundice or acute hepatitis, but its course results in greater enlargement of the liver, enlarged spleen, general lymphadenitis, more and more debility until after several months or years the patient shows a marked decline. In the final stage of the disease severe asthenia, anemia, hemorrhages, and purpura develop. Biliary cirrhosis so closely simulates various other types of liver disease that usually prolonged observation and study are necessary to arrive at a correct diagnosis.

#### MALIGNANCY

Malignancy of the liver and biliary organs, although not very common, assumes a very important place in diagnosis. It may be primary or secondary. Rolleston<sup>24</sup> states that secondary carcinoma of the liver is twenty to forty times more common than primary cancer.

Gall bladder and duct malignancy has been discussed by numerous authors. In reviewing 312 cases Judd and Gray<sup>16</sup> found 212 were of the gall bladder and 100 were of the ducts. The incidence in a large series of biliary diseases was 1.4 per cent of the total number of cases. They point out very strikingly that the most frequent symptoms are (1) pain of gall bladder type, and (2) a complaint of jaundice. The accompanying symptoms are dependent upon the location, extent of and changes associated with the lesions. In their series 64.6 per cent of cases of gall bladder cancer had gall stones. Most cases had had symptoms less than six months. They concluded that a "definite clinical diagnosis was exceedingly difficult."

Malignancy of the liver has an insidious onset of debility, poor appetite, and loss of weight. In secondary malignancy there are additional symp-

toms from the region of primary growth. The liver enlarges, is painful, tender, and may be smooth or nodular. There usually is a low irregular fever. Jaundice and ascites each occur in about fifty per cent of cases. Other mechanical phenomena may develop. Duration of life is variable, but three to six months is a fair average after the condition can be diagnosed.

#### SYPHILIS

Tertiary syphilis is the type of lues that may lead to difficulty in diagnosis. The mere fact that a patient has a positive Wassermann and liver disease does not justify diagnosis of syphilitic liver. In syphilis the onset of the trouble is insidious, the liver and the abdomen enlarge, there is general debility and usually a low grade fever. Splenomegaly is common. The incidence of jaundice is variable, but usually it is present; ascites occur in forty per cent, and pain in sixty per cent of cases. The duration is many years and the termination as a rule is from some intercurrent condition.

#### PASSIVE CONGESTION

Passive congestion of the liver results in a hard enlarged liver. It complicates right sided cardiac decompensation, mitral stenosis, adherent pericarditis or some intrathoracic disease, e.g. emphysema, pulmonary tumors, or chronic fibroid phthisis. The liver enlarges, becomes firm, is painful and tender to palpation and often is accompanied by a mild jaundice, digestive disorders, and splenomegaly. The nature of the heart or chest condition usually is so striking that one would rarely mistake the diagnosis. Fever seldom leads to confusion.

#### CONCLUSION

In conclusion may I call your attention to the fact that in this brief discussion I have tried to emphasize important points in the differential diagnosis of a large number of gall bladder and biliary conditions. The infectious processes often lead to a great deal of confusion in the minds of many practitioners. Most of these are secondary to local or systemic causes, the nature of which may be determined by a careful study of the patient's general condition. The first consideration in any case should be an attempt to separate the gall bladder syndromes from the biliary and hepatic group. Subsequently the infectious diseases are fairly easily segregated from non-infectious processes. Frequently blood counts prove more valuable than temperature observations. While liver function tests are not definite indicators of functional debility, their use will prove helpful in conservative medical and surgical management.

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DISCUSSION

WALTER F. CARVER, M. D., Albion: I would like the essayist to elaborate briefly in regard to chloroform and cinchophen. I am sure his remarks will be of interest to those of us engaged in general practice.

C. L. RUDESILL, M. D. (closing): It has been shown during the past few years that cinchophen and some of the other products, like trinitrotoluene, have caused liver degeneration. There seems to be some idiosyncrasy in certain cases to these various drugs. The idiosyncrasy is such that we get liver degeneration much as we do after large doses of arsenic, chloroform, or phosphorus. I hardly think there is anything more than a rather acute degenerative process. Several years ago we thought that chloroform affected the liver in one way, and some of the other drugs in another way; but the destruction seems to take place in various locations. We know, however, that in many of these patients who have had cinchophen or other irritating substances the reaction may cease and the liver return to its normal function. The immediate effect of the drug in some cases is serious or fatal, while in other cases it is not very serious and only transitory. Cinchophen has been used recently as a test for liver function, but the development of the test has not progressed to the extent that we are able to recommend it.

GAUCHER'S DISEASE AND ITS SURGICAL TREATMENT

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LAFAYETTE

HISTORY

In 1882, Gaucher<sup>1</sup> described a type of splenomegaly associated with anemia which was characterized by the presence of peculiar large cells in the spleen. He thought that it was a primary epithelioma of the spleen.  
The first splenectomy for this disease was done in 1895 and reported by Picou and Ramond.<sup>2</sup> The patient was operated upon for a suspected fibroid of the uterus.  
Bernstein<sup>3</sup> claims the first preoperative diagnosis of Gaucher's disease by means of splenic puncture (1915).  
Pick<sup>4</sup> discovered a gross osseous form of the disease in 1922, and Junhagen<sup>5</sup> in 1926 called attention to the use of radiographs of bones in the diagnosis of Gaucher's splenomegaly.

DEFINITION

Hoffman and Makler<sup>6</sup> have recently defined Gaucher's disease as a "familial, congenital and non-hereditary disease, probably due to a disorder in the lipid metabolism, characterized by the deposition of complex lipid mixtures in the reticulum and adventitial cells of the hematopoietic organs and clinically manifested by splenomegaly, hepatomegaly, moderate generalized lymphadenopathy, pigmentation of the skin, pinqueculae, hemorrhagic diathesis, changes in the bones, hypochromic anemia, leukopenia and thrombocytopenia. The course usually is chronic, often lasting twenty years or longer, exacerbations occurring in the course of complicating infections."

PATHOGENESIS

The etiology of Gaucher's disease quite frankly is admitted as being unknown. "Gaucher's original theory that the disease is a primary epithelioma of the spleen has been abandoned." Mandelbaum<sup>8</sup> states that "the possibility of some protozoan infection as an etiologic factor must not be overlooked."  
The pathogenesis of this condition is well stated by Welt, Rosenthal and Oppenheimer<sup>7</sup> who say that "Gaucher's disease is a rare, congenital, familial, constitutional disorder, possibly of lipid metabolism, in which complex lipoids fail of complete disintegration and are stored in the reticulum cells of the lymphatic-hematopoietic system." Other writers believe that there is primarily a dysfunction of the storage cells which results in a metabolic disturbance.<sup>9</sup> Whatever the process, it goes on almost to the point of replacement of the reticulo-endothelial tissue and results in a fairly well-defined clinical picture.

CLINICAL PICTURE

This disease usually begins in childhood but its onset is not observed. The average age of onset, as found by Hoffman and Makler<sup>6</sup> in a review of eighty-nine cases, is eleven years. Women are more commonly affected, and there seems to be a predilection for Hebrews. That there is a familial tendency is shown by the occurrence of 25 to 33 per cent of the cases in the same family. It is not unusual to find members of the same generation affected.  
No great disturbance of health occurs until the disease has been present for some time. Usually the large spleen is discovered accidentally or the patient seeks relief because of the discomfort caused by the enlargement of that organ. Milch and Pomeranz<sup>10</sup> and Welt, Rosenthal and Oppenheimer<sup>7</sup> have emphasized the point that these patients commonly present themselves because of symptoms referable to the osseous system.  
According to Welt, Rosenthal and Oppenheimer,<sup>7</sup> the complaints in most of the cases are due to enlargement of the liver and spleen, involvement of

the bones and joints or the results of blood changes, such as anemia or hemorrhagic diathesis.

The course of the disease is mild and chronic, the most prominent feature being the progressive enlargement of the spleen, which is present in all cases. The enlargement of the liver is secondary to that of the spleen and the proportions of both may be unequaled by those of no other disease. Probably the largest spleens known have been found in Gaucher's disease. The liver and spleen eventually appear to fill the entire abdominal cavity, crowding the other organs and disturbing their functions.

The more common clinical features, in addition to enlargement of the liver and spleen are: discoloration of the exposed parts of the skin described as a bronze, brownish-yellow or subicteric color. This is present in half to three-fourths of the cases and is not jaundice, but is due to hematochromatic pigmentation; the occurrence in a small number of cases of yellowish-brown wedge-shaped thickenings of the conjunctivae, similar to pinqueculae; the presence of a hemorrhagic diathesis in more than half of the cases (55 to 65 per cent) of which epistaxis is the most common manifestation, although submucous and subcuticular hemorrhages occur; the occurrence of symptoms referable to the skeletal system, affecting chiefly the femur, vertebrae, hip, sternum, tibia and fibula, in about one-fourth of the cases. Potter and McCrae<sup>11</sup> note that Moschowitz and Welt reported cases similar to their own, in which pain, swelling, redness and exquisite tenderness to palpation over a bone led to a preoperative diagnosis of osteomyelitis.

Generalized lymphadenopathy is not characteristic, but visceral glandular enlargement is common. Late in the disease, extreme emaciation may occur.

Rowland<sup>9</sup> remarks that there is a striking regularity in the appearance of symptoms:

"1. *Stage of Pure Splenomegaly.* This earliest stage of the disease presents the appearance of an isolated splenomegaly. The enlargement of the spleen often is compatible with apparent good health, even though the spleen reaches a very large size. Usually the skin is not pigmented. There may be a mild anemia, and leucopenia is not at all constant. The platelets, globular resistance, coagulation time and bleeding time are normal.

"2. *Stage of Spleno-hepatomegaly.* The patients usually come under observation in this more advanced stage of spleno-hepatomegaly. Following the enlargement of the spleen, the liver augments in size and becomes large and firm. There usually is no ascites or icterus. Brownish-yellow pigmentation of the skin appears particularly in the regions exposed to light. The mucous membranes are not involved. The anemia becomes more manifest and is of a chlorotic type. The leucopenia becomes more constant.

"3. *Late Stage.* Hemorrhages or symptoms referable to the osseous system appear at this stage. The hemorrhages are manifest as epistaxis, bleeding from the gums, cutaneous ecchymosis, hemoptysis or menorrhagia. They are not severe and never have caused death. The examination of the blood at this time reveals a mild hemorrhagic diathesis; that is, delayed clotting, non-retraction of the clot and diminution of the platelets. The symptoms referable to the osseous system are pain in the long bones, disability, especially of the hip joint and spine and, on rare occasions, swelling and spontaneous fracture of the lower portion of the femur."

Exacerbations and remissions tend to occur during the course of this disease. The average duration is twenty years, and death usually is due to intercurrent infection. Tuberculosis, however, is thought to be a superimposed infection.

With the report of eleven additional cases by Sara Welt<sup>7</sup> and her colleagues and two cases by Potter and McCrae,<sup>11</sup> the total number now on record is more than a hundred. The former of these observers found roentgenologic changes in the bones of six of their eleven patients, of which the commonest early change was a fusiform expansion of the lower third of the femur.

#### LABORATORY FINDINGS

The blood picture is not characteristic, but the disease presents definite variations from the normal.

A secondary anemia develops at some time in the course of the disease, although it may not appear until late. This anemia is hypochromatic. Potter and McCrae<sup>11</sup> found a tendency to oval macrocytosis in one of their cases and the anemia did not respond to repeated transfusions.

It is agreed that a consistent leucopenia exists but may not be present early in the disease. Splenectomy produces a normal white cell count following an initial leucocytosis.

It has been recently established that there is a constant thrombopenia in this disease. Welt, Rosenthal and Oppenheimer<sup>7</sup> found that the blood platelets are rarely more than 125,000. The platelet count becomes normal following splenectomy.

Rowland<sup>9</sup> states that the blood chemistry study is still quite incomplete. "Determination of the blood lipoids usually shows a decrease of cholesterol, slight increase or decrease in phosphatids and a normal amount of fatty acid. Kerasin has not been found in the blood serum."

Studies as to the nature of the large cells found in the reticulo-endothelial system have revealed only that fat or lipid substances are absent and that the cerebrosid, kerasin, is present.<sup>12 13</sup> These cells never have been identified in the peripheral circulation.

#### DIAGNOSIS

The diagnosis of Gaucher's disease may be established in several ways. The pathologic picture is



a typical and constant one, so that any of the accessible portions of the reticulo-endothelial system may be used for biopsy. Hoffman and Makler<sup>6</sup> report a case diagnosed by section of a removed inguinal lymph gland. Bonta<sup>11</sup> and Welt<sup>7</sup> have suggested bone-marrow puncture. Graham and Blacklock<sup>15</sup> and Bernstein<sup>3</sup> found that splenic puncture can be carried out and sufficient tissue secured for examination without untoward effect. If splenectomy is decided upon, microscopic examination will, of course, disclose the true pathology.

It would seem that roentgen studies of the bones should be a valuable aid in the diagnosis of Gaucher's disease. Milch and Pomeranz<sup>10</sup> have described the x-ray findings thus:

"Roentgenologically, the changes in the bones in Gaucher's disease are characterized by medullary absorption, cortical thinning and expansion of the bone. The medullary destruction which takes place, not as a diffuse process, but in the form of scattered islands, doubtless represents the sites of proliferation of the Gaucher cells. This alternation of areas of absorption with areas of denser bone formation gives the plate a characteristic mottled appearance."

Welt, Rosenthal and Oppenheimer<sup>7</sup> have stated that the commonest early change in the bones is a fusiform expansion of the lower third of the femur. Kirklin and Hefke<sup>16</sup> found that the areas of destruction seem to occur most commonly in the femur and the vertebrae.

TREATMENT

As Pool and Stillman<sup>17</sup> have aptly stated, "There is no logical treatment for Gaucher's disease."

On a purely empirical basis the use of liver extract was suggested by Isaacs and a remission of both objective and subjective findings occurred in one of the cases reported by Potter and McCrae.<sup>11</sup> The spleen decreased in size and these authors believe it was more than incidental to the administration of liver extract.

Before it was shown that the disease was a diffuse one involving the entire hematopoietic system, there perhaps was more reason for removing the spleen.

At the present time the rationale of splenectomy is fourfold:

1. Anemia, when present, is partly due to increased destruction of red cells, although it is also the result of bleeding and myelophthisis. Removal of the spleen should eliminate the factor of blood destruction.
2. The tendency to hemorrhage may become an indication for splenectomy similar to that in thrombopenic purpura.
3. Splenectomy is the only form of treatment which has been attended with any measure of success, a certain number of patients having gained weight, strength and perhaps have lived longer.
4. On a mechanical basis alone, it is probably justifiable to remove the spleen. If that viscus

has not already become annoying because of its size and pressure on other structures, it certainly will become such a tumor, and should be removed before the patient becomes a surgical hazard.

It is now the consensus of opinion that the course of the disease is not arrested by splenectomy, but that the indirect benefits and the possibility of prolonging life warrant the use of a limited therapeutic measure.

PATHOLOGY

"Gaucher's disease involves all of the hemopoietic tissues. The spleen is enlarged enormously, weighing up to 7,400 grams, among the largest spleens seen. The capsule is tense and the consistency firm. On section the cut surface is greyish or brownish-pink or red, and may be mottled with white or greyish streaks. The malpighian bodies are small or may be invisible. Infarcts may be present. On microscopic examination it is seen that the normal structure of the spleen has disappeared and that the organ is made up of widely dilated venous sinuses in which the characteristic large cells are arranged more or less peripherally, sometimes completely filling the sinus. It may be impossible to recognize a definite endothelial lining. The pulp cords are compressed but show no essential change in their cellular content aside from isolated groups of large cells. The follicles are few and small and the walls of the central artery may be thickened. There is no increase in fibrous tissue, and iron-containing pigment is present and increases with advance in the disease.

The liver is large and may present areas of perihepatitis. On section, the markings are indistinct and the parenchyma swollen. Microscopically, there is marked increase in the interlobular connective tissue, and in its meshes are found the typical large cells. The parenchymal cells are unaffected.

The superficial lymph-nodes are usually not enlarged, but those in the thorax and abdomen always are. On microscopic examination one finds the capsule and trabeculae thickened and abundant "Gaucher" cells, which obscure the structure. The lymphoid tissue of the lower ileum and cecum may be hypertrophied.

The bone-marrow is red and soft, sometimes with small white or yellowish areas. The large cells are found singly or in groups with reticulum fibers between them. The growth of these large cells may produce destruction of bone that may be the cause of pathologic fracture.

The characteristic cell of Gaucher's disease is a large, usually round or oval cell, which, however, may be compressed to a polygonal shape or drawn out into long strands. The nucleus is small, eccentrically placed, and not infrequently multiple, as many as twenty-one having been seen in one cell. The cytoplasm contains a network of many fine fibrils, which run in the long axis of the cell and give it a streaked or stippled appearance, depend-

ing upon which way it is cut. Irregular colorless areas can be seen where the fibrils are crowded apart by the accumulation of some material which Mandelbaum insisted was not lipoid in nature and which Epstein thought was a crystallizing cerelerosid (kerasin), though he also found ether-insoluble phosphatids."

The above description of the pathology of Gaucher's disease is that given by Pool and Stillman.<sup>17</sup>

Carr and Moorhead<sup>18</sup> state that "Whereas, the nature and origin of these cells are still moot questions, the histologic picture is uniformly characteristic and pertains to no other disease."

Of the histogenesis of the Gaucher cells, Rowland<sup>9</sup> states that "Most investigators now agree with Pick that Gaucher cells arise from the reticulum in the spleen, lymph nodes and bone-marrow, from the adventitial and periadventitial cells of the small arterioles of the splenic pulp and lymph nodes, and in the liver from the histiocytes of Glisson's capsule as well as the adventitial and periadventitial connective tissue of smaller vessels and also of the central lobular veins." Rowland feels that these cells are, without doubt, enormous, hypertrophied macrophages or histiocytes.

#### PROGNOSIS

Untreated or treated, other than surgically, the average course of Gaucher's disease is twenty years. The disease is a progressive one until some intercurrent infection, usually pulmonary, terminates the life of the patient.

There is sufficient evidence that, by splenectomy, the span of life may be prolonged, symptomatic relief is secured, general improvement in health occurs and that a total economic loss is prevented.

Five per cent of the patients splenectomized have been made worse and nearly 50 per cent showed symptomatic improvement for from one to thirteen years.<sup>9</sup> Hunter and Evans<sup>19</sup> report a case thirteen years after splenectomy. This patient had hypertension but was apparently in good health otherwise. There was no abdominal pain or discomfort, a lessened tendency to hemorrhage and a low platelet count.

Under no circumstances is a cure to be expected following the removal of the spleen, for it is but a part of the hematopoietic system which is diffusely involved.

The operative mortality of splenectomy in this disease has been found to be about 20 per cent.<sup>20 22</sup>

#### DISCUSSION

Gaucher's disease is rarely encountered but should always be considered in the differential diagnosis of splenomegaly. Once in a lifetime is rather often to see a patient with this malady outside of the large medical centers. It was my good fortune to come in contact with one of the cases reported by Potter and McCrae, and I recall distinctly the

unusual appearance of the bone and bone-marrow of the tibia as it was exposed at operation for what was thought to be osteomyelitis.

Splenic anemia may be closely simulated by Gaucher's disease in its clinical picture. I am familiar with such an instance in which the patient presented the very rare yellowish-brown pingueculae-like thickenings of the conjunctivae, the subicteric color of the skin, and a history of repeated gastro-intestinal hemorrhages. In this particular instance the blood-picture contributed no conclusive evidence, and it was not until splenectomy was done that a positive diagnosis of splenic anemia was established.

Just as other rare conditions are becoming less rare because they are being recognized more often, so is Gaucher's disease being reported with increasing frequency, and it behooves us to bear this condition in mind.

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## PALINESTHESIA\*

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Since the time of Wells, Morton and Simpson, the profession has been able to induce general anesthesia and has subsequently spent much effort in discovering new agents and methods for this purpose. Thus far, however, no means has been available for quickly reversing the process, terminating a general anesthetic. This article will describe such a method. The term "palinesthesia" is proposed as being descriptive of this phenomenon.

Our attention has been drawn through personal communications to the fact that aqueous solutions of hydrochloric acid, when injected into the blood stream of experimental animals in profound anesthesia, promptly terminate anesthesia.

Moorman,<sup>1</sup> in an effort to save overanesthetized animals, conceived the idea that anesthesia tended to elevate the Ph of the blood. It was reasoned that introduction of an acid into the blood stream would reverse this process and effect the state of anesthesia. Applying this idea, Moorman discovered that profoundly anesthetized animals did promptly and completely awaken following the intravenous injection of minute doses of hydrochloric acid. These observations were verified by the Duncan Laboratories of Kansas City, Missouri, and by ourselves. With this method we have brought about resuscitation in rabbits etherized to the point of respiratory cessation.

Studies in the intravenous use of hydrochloric acid and other acids in their effects on respiration have been made by Eddy,<sup>2</sup> and by Gessel, Kreuger, Gorham and Bernthal.<sup>3</sup> They do not report having injected anesthetized animals in their experiments.

Since knowing of the effects of this medication in experimental animals we have been mindful of the possibilities of its use to resuscitate human beings who might have become dangerously overanesthetized. Such an emergency arose at Memorial Hospital, Worcester, Mass., in July, 1933.

The patient had an unusual reaction to a commonly repeated and conservative dose of avertin. No reflection upon this anesthetic agent is implied, since our personal series with it embraces over two thousand cases with gratifying results. The patient, following operation, was found to be progressively approaching a state of anesthesia so profound that his condition was moribund. The pulse was rapid and weak and the tidal volume was practically nil. He was obviously in extremis and heroic measures were imperative. At this point an aqueous solution of hydrochloric acid was injected intravenously. This injection was started at 10:15 a. m., and during the ensuing twenty minute period

5.4 cc. of a one per cent solution of hydrochloric acid was given.

Immediately following the injection of the first few drops there was a striking increase in the respiratory excursion. Blood pressure at 10:20 was 100/80. At 10:23 there was motion at the angles of the mouth, and two minutes later the jaw closed and the lips puckered. At 10:30 both hands were in motion. At 10:35 the patient swallowed. At 10:40 he gripped the fingers of an attendant. At 10:45 the patient made an effort to eject the metal air way and gave an incoherent response to question. At this moment a further injection of 3.2 cc. of the same solution was begun and continued over the next five minute period. At 10:50 a foot was in motion. Five minutes later the eye balls were oscillating and the palpebral muscles were functioning. At that time the patient answered questions coherently. From this point the patient remained awake. At 9:00 p.m. the patient complained of wakefulness, a condition quite unusual following so soon after avertin anesthesia.

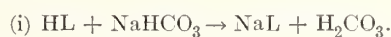
Repeated laboratory studies of this patient have failed to disclose any untoward effect resulting from this medication.

We believe this is the first use of this drug for this purpose in a human subject.

What transpires when solutions of hydrochloric acid are introduced into the blood stream opens many interesting fields of thought and investigation. How the reversal of loss of consciousness, loss of sensation and loss of motion is effected by the injection of HCL is a matter of immediate interest which awaits further investigation. It appears that the discovery of this use for HCL intravenously to terminate anesthesia may prove to be a part of the solution of the physical chemistry of general anesthesia. What actually happens chemically between HCL and the blood components must be the basis for our speculations.

We quote Wright<sup>4</sup> as follows:

"I. Physico-Chemical Reactions. 1. When any non-volatile acid like lactic, phosphoric, or sulphuric acid enters the blood stream, it at once interacts with the bicarbonate present in the plasma as follows:



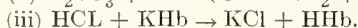
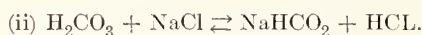
"In the case of lactic acid, sodium lactate and carbonic acid are formed. The advantage of this reaction to the body is clear. Lactic acid is a strong acid, which means an acid which dissociates freely and gives rise to many H ions, and thus makes any solution in which it is present very acid; it is also a non-volatile acid which is excreted slowly in the urine. By the interaction with sodium bicarbonate it is converted into a neutral salt and  $\text{H}_2\text{CO}_3$  is liberated. Now  $\text{H}_2\text{CO}_3$  is a much weaker acid, giving rise to few H ions; furthermore, it is a volatile acid which is readily eliminated in the lungs. Sodium bicarbonate has therefore acted as a buffer substance; it has caused H ions to be

\* Presented before the St. Joseph County Medical Society, February 6, 1934.

'mopped up,' fewer are left in the solution, and the reaction of the blood has altered to a much slighter extent than otherwise would have been the case. This is why the term 'alkali reserve' was introduced to describe the bicarbonate of the blood.

"It follows that as long as  $\text{NaHCO}_3$  is present in the plasma, no acid stronger than carbonic can exist in the blood as such.

"2. But the acid formed in largest amounts in the body is  $\text{H}_2\text{CO}_3$  itself, which of course cannot be dealt with by  $\text{NaHCO}_3$ .  $\text{H}_2\text{CO}_3$  is dealt with in the following way:



$\text{H}_2\text{CO}_3$  interacts with the sodium chloride of the plasma to form sodium bicarbonate and hydrochloric acid. On the face of it this reaction seems both meaningless and impossible. Instead of the weak acid  $\text{H}_2\text{CO}_3$ , we have formed the stronger acid HCl, so the H ion concentration of the solution ought to rise still higher. Again, a weak acid like  $\text{H}_2\text{CO}_3$  cannot displace chloride from its union with Na in NaCl. The explanation is this. An equation like ii above can act in either direction if the product of the reaction that would tend to drive the process the opposite way is at once removed. In other words, the equation will go from left to right if the HCl formed is at once removed from the plasma. This actually happens. If blood is exposed to increased tensions of  $\text{CO}_2$ , the amount of  $\text{NaHCO}_3$  in the plasma increases and the chloride diminishes in the plasma and increases in the interior of the red blood corpuscles. The HCl resulting from equation ii, as it is formed in minute amounts, migrates rapidly through the corpuscular wall to be dealt with suitably in the red cell. This is the Hamburger phenomenon, or chloride shift."

The production of a considerable quantity of  $\text{CO}_2$  immediately following the injection of this acid into the blood stream accounts for the prompt increase of tidal volume.

It is apparent that equations ii and iii of the foregoing quotation that considerable quantities of reduced Hb are also produced following the injection of such acids into the blood stream. What the effect is of suddenly increasing the amount of reduced Hb in the blood stream of an anesthetized animal is open to speculation.

Attention is directed to the fact that in the case of the patient herein reported the 8.6 cc. of one per cent solution of hydrochloric acid represents about 1 minim of the acid. The blood volume of an average individual is approximately 100,000 minims. It is therefore evident that the alteration of the blood, producing palinesthesia, is extremely small and it is probable that lowering of the blood Ph by this minute addition of acid may be the explanation we are seeking.

The revival of patients who are endangered because of overanesthetization, while important in itself, is not the only application for this agent.

Cases of impending death from drowning, severe electric shock, surgical shock, asphyxia from toxic gases and alkelemias might be benefited by its use. It would be assumed that heart function is still present.

Cases of sleepiness, such as occur in long sustained aeroplane flights, offer a possibility for its use. This is suggested by the fact that our patient, who normally would have been sleepy, complained of annoying wakefulness for many hours following the intravenous use of HCl.

Many interesting problems for research are suggested by the results of this new use of HCl.

Among these are:

(a) The intravenous injection of reduced Hb to anesthetized animals.

(b) A study of changes in the PH of the blood, before, during and following general anesthesia, associated with the injection of HCl.

(c) A study of the effects of alkalization of subjects preceding anesthesia, in view of the information disclosed by the intravenous use of HCl.

(d) Studies in the intravenous use of other acids in anesthetized animals.

From our limited experience with this medication we believe that it may be a life saving measure on occasions suggested above, when the usual procedures have failed.

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## HEART DISEASE COMPLICATING PREGNANCY\*

### DIAGNOSIS AND TREATMENT

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More than ninety per cent of significant heart disease in pregnancy is of the rheumatic type. The usual lesions are mitral stenosis and insufficiency with aortic insufficiency in some cases.

The purpose of this paper is to emphasize certain broad principles regarding heart diseases in pregnancy.

The first of these is that pregnancy itself may cause a fatal overload to a previously damaged heart. It is well recognized that the strain of labor may precipitate heart failure in such cases, but the cardiac overload from pregnancy itself needs emphasis.

\* Presented before Indianapolis Medical Society, 1933.



H. G. Stander,<sup>1</sup> using the method of Marshall and Grollman of determining cardiac output in pregnancy, has shown that in normal women the cardiac output begins to rise at about the fourth month of pregnancy, and rises steadily from that point to term, the average increase above normal being more than 50 per cent. This means that pregnancy itself in normal women puts a 50 per cent overload on the heart. This does not include the work of labor. About the only evidence of this 50 per cent increase seen in the woman with a normal heart is some dyspnoea on exertion as she approaches term. In a woman with mitral stenosis this overload may mean decompensation or death. Therefore, for the first time do we have laboratory evidence of what we thought was a clinical fact, namely, that pregnancy alone may overload a damaged heart.

Cardiac overload which is due to pregnancy might be used as an argument against allowing pregnancy to occur or to continue in any woman with cardiac disease. Past experience has already proved such argument incorrect because many cardiacs go through pregnancy with no apparent bad effect. However, we cannot rate cardiacs in pregnancy as ordinary cardiacs are rated. A broader margin of safety must be allowed in view of the now proven overload of pregnancy.

Five primary questions must be answered about any young woman who has heart disease.

First: Is it safe for her to become pregnant?

Second: If pregnant, is it safe to allow the pregnancy to continue?

Third: What type of prenatal supervision is adequate from the standpoint of the heart lesion?

Fourth: What type of delivery should she have?

Fifth: Shall she be allowed to become pregnant again?

The advice to a cardiac patient as to the safety of undertaking a pregnancy depends upon the past history of decompensation, the present functional ability of her heart, and her economic status.

Pregnancy is usually contraindicated for a woman who has been definitely decompensated previously.

The present functional ability of the patient's heart may be estimated by Pardee's classification.<sup>2</sup> Pardee believes that the prognosis for a cardiac in pregnancy depends more on the patient's ability to perform physical exertion than on the pathologic state of valves or myocardium. Therefore, with the cooperation of the New York Heart Association, Pardee has made the following classification:

Class I. Those who are to perform ordinary and usual physical activity without unusual fatigue, palpitation or dyspnoea.

Class II. A. Those who are able to perform the usual normal physical activity, but who have discomfort in so doing. Such a person would have an increase in shortness of breath after climbing

stairs or walking against a wind or up grades, or after such things as house cleaning or lifting heavy articles. These patients would by some be said to be "fairly well compensated."

Class II. B. Those who are unable to perform the more difficult features of ordinary physical activity without stopping on account of fatigue, dyspnoea or palpitation. Such activities would be climbing two flights of stairs or walking at an ordinary rate for a half mile. These patients might be called "somewhat decompensated."

Class III. Those who are unable to perform the simplest physical activity without fatigue or shortness of breath or palpitation. Such a patient would be unable to walk two or three hundred feet or to climb one flight of stairs without resting, or would be unable to do any housework. These might be said to be "much decompensated."

Experience at the New York Lying-in Hospital shows that Class I patients are good risks in pregnancy and stand labor well. Class II-A may show slight acceleration of pulse and respiration plus some dyspnoea. The second stage in these patients should be shortened by forceps. Class III patients are, of course, bad risks. The only deaths in their series occurred in classes II-B and III.

Another important factor in the decision as to a prospective pregnancy is the economic status of the patient. Is she financially able to employ sufficient help to relieve her entirely of her household duties or to spend a lengthy period in a hospital if either becomes necessary? Only after considering all of these points can such a woman be advised properly.

Burton Hamilton,<sup>3</sup> cardiologist to the Boston Lying-in Hospital, says: "A patient with a serious heart condition should be warned that:

"1. She takes a risk approximately five per cent of death during puerperium or pregnancy.

"2. She takes a larger risk, possibly 10 per cent, of surviving but of failure to have a living baby at the end of her pregnancy.

"3. She takes a less clearly statable risk of permanent or prolonged temporary disability.

"4. She must (in order to keep her risks as the above figures) be prepared to follow explicitly rules of rest through pregnancy and go to the hospital on the signs of failure, and to consent to interruption of pregnancy on indication."

Prenatal care for the cardiac should include the usual supervision and observation plus advice which will not only lessen the burden of her heart, but educate her to the warning symptoms of impending decompensation. She should be warned against violent exercises such as running to catch a street car, excessive stair-climbing, or lifting. The amount of housework permitted depends upon the degrees of compensation she maintains as judged by dyspnoea and pulse rate. The activity allowed her may be varied, depending on her reaction to the

program first outlined. It will usually be found necessary to limit her activity more and more, the nearer she is to term.

In addition to overexertion, the other most important advice is that regarding acute infections, such as colds, tonsillitis, and influenza. Cardiacs stand these during pregnancy as well, usually, as do other individuals only if put to bed. Therefore, these women should be made to understand that such infections may precipitate heart failure if they remain up and about. This again illustrates the point that the prognosis for a cardiac during pregnancy depends somewhat on her economic status.

Proper prenatal care can prevent failure in most cases, but in spite of the above precautions heart failure may develop. Persistent cough, with or without hemoptysis, should never be disregarded. Rales at the bases in a cardiac who has a rapid pulse and who is dyspnoeic should be regarded as evidence of beginning heart failure.

Failure in the first five months of pregnancy is usually an indication for termination of the pregnancy, but in no case, early or late, should operative intervention be instituted while the heart is decompensated. Desperate attempts to save the mother's life by terminating her pregnancy while her heart is failing usually end fatally. Much better results are obtained by rest in bed, morphine and digitalis therapy, carried out in a hospital, until such a time as the cardiac consultant deems the heart competent.

Congestive heart failure in the latter half of pregnancy presents a more difficult problem in that we are influenced on one hand by the desire to postpone termination of the pregnancy in order to get a viable child, and concerned on the other hand by the knowledge that improvement in heart competency obtained by bed rest, morphine, and digitalis may be only a temporary improvement. If decompensation again occurs in a pregnant woman who has been under the above treatment, there is nothing left to do. It seems wise, therefore, to wait only long enough to give the heart a chance to build up a reserve, and then terminate the pregnancy by whatever method is indicated.

Foster Kellogg and Burton Hamilton believe that interruption of pregnancy should be advised for the following:

- "1. A patient who has or has had clear signs of congestive heart failure.
- "2. A patient who has complicating nephritis or hypertension. (This is common in the rheumatic type and is not generally enough recognized as indication for interruption.)
- "3. A patient who has auricular fibrillation.
- "4. A patient who has had a recent acute rheumatic fever."

The method of choice of interruption of pregnancy for a cardiac in early or middle pregnancy is rather generally recognized to be hysterotomy under local anesthesia plus some basal anesthetic such as sodium amytal. Hysterotomy is a clean surgical procedure which is less shock-producing than abortion from below. Hysterotomy is particularly indicated because it permits simultaneous sterilization. It is almost universally true that if a woman has a serious enough heart lesion to necessitate interruption of the present pregnancy, the lesion will also jeopardize her safety in future pregnancies. In other words we believe that if interruption of pregnancy is indicated because of heart disease, sterilization is also indicated. Therefore abdominal hysterotomy plus sterilization under local anesthesia is the method of choice.

When the pregnant woman who has heart disease reaches term, a decision must be reached as to the type of delivery which will be best in her individual case.

An important point to be remembered is that even in the presence of congestive heart failure, labor is often short and delivery easy. The physiology of this has not been explained but it is a recognized clinical fact and should be borne in mind before any operative type of delivery is chosen. As an example of the short labor which can be expected in the occasional case, the following case is presented:

Mrs. E. N., age 38, para IV. A well defined mitral stenosis. Acute rheumatic fever in childhood. For past four years has had heart symptoms. Whenever she had a cold, had extreme dyspnoea and weakness. Admitted to hospital 8½ months pregnant, dyspnoeic, cyanotic, edematous, and with moist rales at bases of lungs. Was kept in bed and digitalized with no improvement. Suddenly went into mild labor and in one hour delivered herself spontaneously of a living, full term infant. Patient gradually lost ground during the next six weeks in the hospital and was dismissed at her own request because she wanted to be in her own home. At the time of dismissal her condition indicated that she probably would never be out of bed. As long as this patient had been allowed to continue her pregnancy to term, it would have been a mistake to deliver her by Cesarean section in order that sterilization be done. The downward progress after the mild labor of only an hour's duration indicated what a poor risk the patient would have been. The other moral to be drawn is that sterilization should have been done on the patient after her first delivery.

If a vaginal type of delivery is chosen, labor can be made less hazardous by the three following procedures: effective analgesia, constant observation of the patient for signs of heart failure, and shortening of the second stage of labor by a judicious use of forceps as soon as the cervix is completely dilated.



Satisfactory analgesia can be accomplished by combinations of sodium amytal, morphine, rectal analgesia and inhalation ether as indicated.

Pulse and respiration are the best guides to competency of heart muscle during labor. Pardee believes that pulse and respiration should be counted every half hour. He states that: "The pulse should not go over 105 to 110. The respiration should not go over 28-30. If they reach those figures, it is a sign that cardiac failure has set in, and labor must be ended promptly. If labor is not far enough advanced for this, the patient should be given a large dose of morphine and allowed to rest. A great deal of harm is done by operative procedures during severe cardiac failure, particularly intra-uterine procedures through the vagina. Cesarean section seems to be well borne, but even this should not be done if the patient shows marked cardiac failure, if it is possible to wait for the results of medical treatment. If a better state of cardiac function can be achieved, the mortality will be very low."

Cesarean section on the properly selected case and done under local anesthesia is safer for many cardiacs than a long or moderately long labor. For the primipara or para two, Cesarean section will produce much less cardiac strain than the average labor. If the low cervical operation is done, the postoperative period will be smooth, there being no distention and very little discomfort. Only one accustomed to doing this type of Cesarean section will be able to realize the full truth of the above statement.

Cesarean section has the added advantage of permitting simultaneous sterilization if indicated; however, Cesarean section should not be chosen as the type of delivery in a given case merely because of the sterilization. It should be borne in mind that sterilization done at Cesarean section is not so likely to be permanent as sterilization done four or five months after delivery.

The choice of vaginal delivery or Cesarean section should be made only with the aid of cardiac consultation. Such consultation will also aid in the decision as to when operative interference is safe. Lives have been lost by attempting delivery in the presence of congestive heart failure, and also by undue conservatism in postponing operative intervention at a time when the patient is still undelivered and recovering under treatment from congestive heart failure. If decompensation recurs in a bed patient, there is very little left to be done. Cardiac consultation will prevent such errors.

The indications for sterilization can be given briefly. If interruption of pregnancy is indicated in any patient because of cardiac pathology, sterilization is likewise indicated for that patient because it is very unlikely that such a serious heart lesion will improve enough to justify a future pregnancy.

The indications for sterilization should be even broader than this. Foster Kellogg and Burton

Hamilton as a result of their work in the Boston Lying-In Heart Clinic state this broader indication as follows: "It is, however, in our opinion justifiable to sterilize a patient with a clearly, seriously damaged heart who has not yet developed any of the particularly dangerous conditions, providing the patient requests it in the full knowledge of her risk with future pregnancy. The fact that a cardiac has survived one or more pregnancies without decompensation does not justify the assumption that she will continue to succeed."

As illustrations of several of the points made in the above, the following cases are reported:

Mrs. R. W., age 26, Para I. History of acute rheumatic fever at age 12. Admitted to the hospital by ambulance. No medical attention until a few days prior to term. On admission was in active labor and was edematous, cyanotic and orthopneic. Diagnosis: Full term pregnancy, spontaneous labor, mitral stenosis, and congestive heart failure. Cardiac consultation obtained at once. As the patient was almost fully dilated with the head engaged, it was impossible to stop labor until better compensation could be obtained. Intravenous digitalis and inhalations of oxygen were given. The fetal heart was rapid and irregular as a result of the anoxemia of the mother.

The consultant believed that anesthesia was contraindicated but recommended analgesia approaching anesthesia in the form of large doses of morphine.

She was delivered in a sitting posture by an outlet forceps. The infant was dead and the mother died four hours later.

Had this patient had medical attention earlier she should have been advised:

First, against pregnancy; second, against continuation of pregnancy had she been pregnant when first seen; and, finally, to have an elective Cesarean section at term.

This case also illustrates the point that cardiacs may survive their labor and then die suddenly several hours later.

Mrs. E. B., age 32, Para V, with four living children. History of acute rheumatic fever in early childhood, several attacks of influenza and one attack of pneumonia. Cardiac diagnosis: Mitral stenosis. When first seen she was three months pregnant and decompensated. In view of her four living children, her mitral stenosis and her decompensation, our recommendation was bed rest and digitalis until her condition justified surgery, then hysterotomy and sterilization. This advice was not accepted and she was carried on to term under bed rest and digitalis at intervals. At this time the medical consultant quite properly recommended delivery by Cesarean section and sterilization. This was done under local anesthesia. Recovery was uneventful until the 12th day when she apparently went into fibrillation and died. Autopsy showed coronary embolism and endocarditis. In viewing

the case in retrospect all those connected with the case felt that hysterotomy might have prolonged her life for a time at least.

Mrs. C. H., age 37. Para III. Two living children. History of influenza. She had had two attacks of decompensation during this pregnancy, each time being advised to have a hysterotomy after proper bed rest, and refusing each time. At five and one-half months she had a severe attack of congestive heart failure at which time she consented to operation. Physical examination showed about a 5½ months pregnancy, a mitral stenosis and severe congestive heart failure. She was kept in bed under morphine and digitalized. There was only slight improvement. Although realizing the risk, it was believed the only chance of recovery depended on terminating the pregnancy in the most rapid and least traumatic way. Hysterotomy and sterilization were done under local anesthesia. Death occurred on the fifth post-operative day. Had the patient been willing to have pregnancy interrupted when first advised, she probably would have recovered.

Mrs. M. L., age 37, Para VIII. Six living children, mitral stenosis and mild hypertension. Moderate decompensation at seven months. Cardiac consultation obtained. Our combined opinion favored bed rest plus digitalis until term, at which time we believed patient could be delivered vaginally with little cardiac strain because of the multiparity. Bed rest and digitalis improved the heart; at eight months patient had a profuse sudden vaginal hemorrhage, marginal placenta previa was discovered, and a Braxton-Hicks version was done under ether anesthesia. This stopped the hemorrhage and the patient delivered herself spontaneously, in one hour, of a living eight months infant which survived. She had mild evidence of decompensation after delivery but improved and was able to leave the hospital in two weeks. Sterilization was recommended at four months postpartum but was refused. It is probable that this patient will have severe decompensation in another pregnancy. A Cesarean section done on this patient, a para VIII, merely to include accompanying sterilization, would have been faulty judgment in view of the easy labor which was predicted and which occurred.

Mrs. A. M., age 21, Para II. Previous pregnancy terminated at two months by criminal abortion which was followed by sepsis and endocarditis. When first seen by me she was four months pregnant and had a well compensated mitral insufficiency. At seven months she developed moderately severe congestive heart failure, was put to bed and digitalized. A fair degree of compensation resulted. She was kept in bed until term. After about two hours of spontaneous labor her pulse and respiration rates began to increase. A Cesarean section was done under local anesthesia. Sterilization was recommended but refused. Re-

covery of mother and baby was uneventful. A year elapsed, during which the patient was practically free from cardiac symptoms, being able to care for her baby and do her housework. She again became pregnant and did well for about seven months when she again became decompensated. Bed rest and digitalis again improved cardiac reserve. A second Cesarean section under local anesthesia was done, this time being accompanied by sterilization. Recovery was again uneventful and the patient again was able to resume most of her normal activities. This case is an example of a patient who had enough cardiac reserve to permit normal activity when not pregnant, but not enough to take care of the cardiac overload of pregnancy. Future pregnancies were plainly contraindicated in this case.

Finally, two cases of hysterotomy and sterilization are presented as examples of indications for that procedure.

Mrs. E. S., Para I, age 25. History of acute rheumatic fever at age of 5, 12 and 24. Diagnosis: Mitral stenosis, aortic insufficiency, chronic nephritis and hypertension, two months pregnancy and congestive heart failure.

On admission showed a blood pressure of 200 systolic and 130 diastolic, a pulse of 140, dyspnoea on being out of bed and moist rales at the bases.

The medical consultant advised bed rest and digitalis to improve the cardiac situation and then termination of pregnancy plus sterilization. As soon as the heart condition had improved enough to justify intervention, the pregnancy was terminated by hysterotomy under sodium amytal and local anesthesia. The isthmic portions of both tubes were resected at the same time. Recovery was uneventful. At the time of discharge, the heart was fairly well compensated but the hypertension was still present, the blood pressure being 170 systolic and 100 diastolic. The future of this patient is, of course, uncertain, but all who saw her were convinced that a continuation of pregnancy would have caused her death even before viability of the infant. This case also illustrates the coexisting hypertension which frequently develops during pregnancy in patients whose cardiac pathology is of rheumatic origin. Hypertension when superimposed on the cardiac overload of pregnancy usually points to early heart failure in such cases and is accepted as a prime indication *per se* for termination of pregnancy.

Mrs. F. M., Para III, age 33. History of scarlet fever and acute rheumatic fever. Cardiac diagnosis, mitral stenosis. During her last pregnancy, two years previously, she had developed congestive heart failure at eight months. At that time bed rest and digitalis improved the patient sufficiently so that she tolerated a short labor and vaginal delivery. Sterilization was recommended at four months postpartum but refused, the patient believing that contraception would protect her well enough. After two years she again became preg-



nant and at three months developed evidence of congestive heart failure. In view of the past history and present physical findings, the cardiac consultant advised interruption of pregnancy and sterilization. After a period of bed rest and digitalis, hysterotomy was done under local anesthesia and the isthmial portion of both tubes excised. Recovery was uneventful. The patient has been in a fair state of health since—a period of one year.

#### SUMMARY

1. Stander's recent work shows a fifty per cent increase in cardiac output from the fourth month of pregnancy until term.
2. A complete history including questions as to possible rheumatic infections which may have damaged the heart, and a careful examination of the heart early in pregnancy are necessary if we are to diagnose heart lesions which, although symptomless at the time, may go on to failure later in pregnancy or labor unless treated.
3. Pardee's classification of cardiac complications in pregnancy on a basis of functional ability is a useful guide as to type of delivery and prognosis.
4. Infection and overexertion are the two common precipitating causes of congestive heart failure in pregnancy.
5. To attempt delivery while the patient is in heart failure is almost always fatal, the better procedure being to postpone delivery if possible until a better cardiac functional state is attained.
6. Hysterotomy under local anesthesia is the method of choice for interruption of pregnancy where such is indicated because of heart disease.
7. Cesarean section under local anesthesia is tolerated much better by cardiacs than a long labor.
8. Experience has shown that the cardiac indications for sterilization should be more inclusive than recognized previously.
9. Early cardiac consultation will lower maternal mortality by accurate diagnosis of the functional ability of the heart.

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## THE VALUE OF RADIATION THERAPY IN MALIGNANCY\*

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The value of an early diagnosis in any malignant lesion is of the greatest importance. Malignancy may be classed under the four following divisions:

1. Tumors in which radio-therapy is the treatment of choice.
2. Tumors in which cauterization and radio-therapy give the best results.
3. Tumors in which surgery and radio-therapy are definitely indicated.
4. Post-operative recurrences.

In the first class we should place all the highly malignant tumors of epithelial origin placed in Broders Grade I. Most of these tumors metastasize early, showing metastasis when first seen. They are usually quite sensitive to radiation therapy.

In this group should be included the lymphosarcoma, lymphoblastoma and Hodgkins' disease. Even the most radical of surgeons are convinced that more relief can be obtained by x-ray or radium, properly applied, than by any other known treatment. Removal of one of the most accessible glands for biopsy to confirm the diagnosis and make the record complete is always advised.

A cure cannot be expected; however, temporary relief and great comfort for the patient can be obtained by radiotherapy. In the highly malignant tumors of the female breast it requires a great deal of judgment and experience to refrain from radical surgery. Not only is the metastasis better controlled by radiation, but also the primary growth will frequently disappear by this method of treatment. A specimen for biopsy is desired though it is not imperative. This is particularly true in the young individual under thirty years of age for the reason that some distant metastasis will cause a fatality within twelve to eighteen months. Certainly radical surgery, which the patient thinks and feels is mutilating, is never indicated.

In the second group, a majority of the malignancies of the skin can be cured by radiation (preferably radium) with less scarring than by any other method, if seen early. In the advanced or the massive tumors of the skin cauterization is indicated before radiation for two reasons: First, to render the cells more radio-sensitive by its devitalizing effect; second, to be able to treat the base and margins of the tumor, thereby requiring a much smaller dose of radiation. Cures can be obtained by x-ray therapy, though in our experience better cosmetic results with less scarring are obtained with radium properly applied.

In this first group we should include the simple moles and many of the small epitheliomata that can be cured by cauterization alone; however, radium applied to the base immediately after cauterization is completed will give a higher percent of cures. A word of warning should be given in attacking the deeply pigmented mole by cautery or surgery. These deeply pigmented moles, and more particularly the black moles, should receive radium when first seen and be removed by the cautery two or three weeks later. In other words, attack these highly malignant skin tumors with cautery when they are the least viable or sickest,

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which is thought to be the second and third week following radiation.

In the third group, the best illustration is seen in the massive tumor of the breast with metastasis in the axilla, supra or infra clavicular areas, and the ulcerating breast tumor with similar metastasis where both surgery and radiation are distinctly indicated. Neither of these agents alone will give the patient the greatest relief or the greatest number of months or years of comfort. When both are used properly, great relief will frequently occur with apparent extension of the life of the individual.

Every physician should ask himself a few questions as soon as he has seen and examined every patient suffering with a cancer: (1) Has this patient a chance for a cure? (2) If a cure can not be expected, what procedure will give him or her the greatest relief with the least suffering? (3) Should this patient be subjected to any treatment?

To answer all these questions may tax the most experienced surgeon and the most experienced radio-therapist. Certainly a consultation with the family physician, the surgeon and the radio-therapist is to be sought, for in no other way can advancement be made in this, the most terrible of all diseases.

The fourth group consists of the post-operative recurrences which in the most instances will obtain the greatest relief from high-voltage x-ray (200 K. V. or more) and by radium implantation into the recurring skin tumors in the post-operative scar.

It is impossible to discuss cancer as it affects the numerous organs and tissues of body in a short paper. I believe we are now in an era of understanding and no longer will we hear the cry that surgery and radio-therapy, the only two agents that have stood the test of time in the treatment of malignancy, are competitors.

Both have definite indications that are well recognized by most every physician. No physician who is honest, and these are the only ones that should be permitted to treat malignancy, would advise surgery in cancer of the cervix uteri except in the very early case, the one that is limited to the cervical canal. Radium has proved to be the best agent. Simple hysterectomy for cancer of the cervix uteri is followed by fatal recurrence in nearly one hundred per cent of cases. The radical Wertheim operation requires great skill and experience to be properly performed and is comparable to the modern radical operation for carcinoma of the female breast.

Radiation therapy, particularly radium, is a two-edged weapon; if too little filtration or too great a dose is given, the normal structures will be destroyed, resulting in necrosis, sepsis, and fistulae, if not death. For these reasons much experience, as well as proper training, is necessary. It requires knowledge, honesty and much experience to

obtain all the good these agents may give without the evil they may do. Radical radiation, when palliative radiation is indicated, results in disaster just as quickly as radical surgery under similar conditions.

In every case of malignancy that is to be treated by radiation the results obtained will be governed by the extent of the disease, the accessibility of the neoplasm, the radiosensitivity of the tumor, and the radiosensitivity of the surrounding tissue, and lastly, by the uniformity of the radiation. This last factor cannot always be attained but can be approached best by one who is familiar with the use and the results of both radium and x-ray. It may require implantation of radium element needles into the tumor or tumors, radon (radium emanation) implantation and the use of the radium pack externally (highly filtered) or x-ray radiation to obtain the best results.

May I again urge you to educate your patients to consult you early so that as early a diagnosis as is possible can be made? I should also like to warn you that frequent as well as rough examinations will result in a more rapid growth of the tumor and in a higher per cent of early metastasis. I beg of you to remember that every malignant tumor is curable so long as it remains local if complete removal or complete destruction of this tumor is done early. It is well to keep in mind that one malignant cell in the lymph or blood stream usually makes that patient a hopeless case. Again, remember that this one cell in a short while will produce in the organ where it lodges a cancer of the same character from which it sprang. By frequent or rough examinations you may dislodge an embolus that will be transported to a regional lymph node. If the embolus should enter the blood stream, it will be carried to some vital organ, usually to the liver, to the brain, or to some bone, lodging in these structures because they have very small blood vessels.

To illustrate the value of surgery and radiation properly applied, brief reports of three cases are presented. To obtain this result it is necessary for the surgeon and radiologist to know the value of these two weapons (surgery and radiation) and to cooperate with each other. A surgeon trained in radiology or a radiologist trained in surgery can obtain these results provided great experience has been attained. We should use the weapons we have that have proved of the greatest value. Again let me urge the family physician, the one who usually sees the patient first, to cooperate with the surgeon and radiotherapist by seeking the advice of both. By this early cooperation an understanding will soon be developed that will be invaluable to the sufferer of cancer and sarcoma.

#### CASE I.

Mrs. H. Age 47. Diagnosis: Scirrhus carcinoma of both breasts. Father died of carcinoma



of the throat. Mother died of carcinoma of the intestines. One sister died of carcinoma of the breast. Two brothers and six sisters living and in good health. Three brothers died in infancy.

In May, 1928, patient noticed a lump in the left breast. Several other nodules soon appeared in this breast. In a short time ulceration appeared. Four months later a lump appeared in the right breast, and one month later a metastatic node appeared in the left axilla.

Examination October 25, 1928, showed the left mammary gland was involved in nodular masses. The skin over the left mammary tumors was ulcerated. One large metastatic node was present in the left axilla. The right breast was involved in a nodular tumor; one small metastatic lymphnode was present in the right axilla.

Simple amputation of both breasts was performed by Dr. E. E. Allen. On the day of operation 50 mgs. of radium element were placed in each axilla in the lymphnode beds. Three weeks later both axillae were x-rayed through anterior and posterior portals and this was repeated two months later.

Patient returned in three months with three recurrent nodules in the scar. These disappeared by treatment with radium pack. Two metastatic nodes were present in the right axilla and these disappeared after radium pack treatment.

Five months after operation the patient returned, almost exsanguinated from a profuse hemorrhage from a uterine fibroid (the size of a four months pregnancy) which was present at the time of operation. Red blood cell count was 2,240,000. Hemoglobin 30% (Sahli). Without anesthesia 1,700 mg. hrs. radium element was given intrauterine. The fibroid tumor, which was the size of a large grapefruit, soon disappeared (three months) and gave no further symptoms. A permanent artificial menopause occurred.

The patient remained symptom-free for three years when metastasis in the lymphnodes of each side of the neck and floor of the mouth appeared, but very promptly disappeared under x-ray therapy. One month later a large metastatic mass appeared in the abdomen and promptly receded under x-ray therapy. Seven months later metastatic nodes appeared on both groins, and quickly receded under x-ray therapy.

Two months later the patient succumbed from metastasis in the liver and the lungs. The life of this tumor was four years, and we are sure that little or no pain was ever experienced. Had no treatment been given she would have succumbed in a few months. The pain, distress and care of a foul ulceration of the breasts was also prevented and her life was certainly extended.

This patient received very definite relief from treatment by surgery, radium and x-ray. Not one of the agents alone would have given relief.

#### CASE II.

Female, age 63. Diagnosis: Recurrent metastatic carcinoma of the left breast.

In March, 1931, a tumor was removed from the left axilla and a microscopic diagnosis of scirrhous adeno-carcinoma of the breast was made, the pathologist also giving the information that the tumor was metastatic. No tumor of the breast had been discovered. One week later the breast was removed and, on incising the specimen, a very small tumor was found in the central portion of the upper half of the breast.

We saw this patient six months later with an axillary recurrence, fullness and induration was present in both the supra and infra clavicular areas. Her chief complaint was pain in the radial side of the forearm, thumb and index finger. The pain was severe and morphine gave only partial relief, and only for a few hours.

Radiation to the entire left shoulder girdle was given through anterior and posterior portals using 200 K.V. and 1 mm. of copper filtration. Relief from pain was prompt. Treatment was repeated two months later.

She remained free of symptoms for two years, enjoying apparent good health all this time. Pain again appeared, rapidly increasing in severity and becoming uncontrollable, even with morphine, in a few weeks. Examination revealed one small lymph node the size of a small olive behind the mesial portion of the clavicle with supra and infra clavicular fullness. Treatment was repeated and prompt relief was again experienced. She has remained free of pain for two months but will be expected to have a recurrence.

#### CASE III.

Male, age 64. Microscopical diagnosis: "Fibro-Sarcoma."

In April, 1930, a tumor was removed from the anterior and upper part of the left leg, the specimen weighing 38 gm. It had been present three years; the growth had been slow until three months prior to removal, when it began to grow rapidly.

The patient was seen five and one-half months after removal of the tumor, at which time the recurrent tumor measured 5 x 8 cm. and was estimated to be 4 cm. in thickness. The ankle and foot were edematous.

Treatment: Fifteen 10-mg. radium element needles were implanted in the margin of the tumor. The distance between each needle was 1½ cm. They were allowed to remain in the tumor for eight hours. Complete regression of the tumor occurred in four months. There is no evidence of recurrence more than two years after radium implantation. The only evidence he has of having had a tumor on the leg is a deeply pigmented skin at the site of the tumor. The skin was cyanotic at the time of application, though ulceration or any break in the skin never occurred.

# THE JOURNAL

OF THE  
INDIANA STATE MEDICAL ASSOCIATION  
DEVOTED TO THE INTERESTS OF THE MEDICAL  
PROFESSION OF INDIANA

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JUNE, 1934

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## EDITORIALS

### THE LAY PRESS AND THE PHYSICIAN

The lay press is reflecting an increasing interest in various phases of medical professional affairs, some of which we have commented on in THE JOURNAL. Recently the Evansville *Journal* carried an editorial note in its edition of April fourteenth, which we reprint in full:

*"Medical Profession's Standards.* In every profession there are those who indulge in practices that are regarded as unethical by the group. Formerly it was left for the state to punish these practitioners, but there is a growing tendency for professional men to oust from their ranks those who prove unworthy of public confidence.

"It is commendable to see the medical profession, which for some years has been in need of trimming at the edges, making use of this means of eliminating quacks. That the profession is self-purifying is evidence of the high level of its standards as a whole.

"Recently a county medical society suspended from its membership an alienist who had given questionable testimony in a number of important murder cases. Subsequently the state society sustained the action of the county society, officially ostracizing the physician from his profession. It was held that public confidence in the medical profession was being weakened by such testimony as the offending specialist gave.

"Neither the medical profession nor society can afford to have the suspicion abroad that the profession is venal. Public confidence in the word and skill of medical practitioners is essential."

We must admit that we are in entire accord with almost everything the Evansville editor has to say on this subject; indeed, there is much mate-

rial therein over which the average physician may well reflect. It is quite true that for years past we have looked to the state to punish violators of the medical law and even of the code. Our experience of several years as a member of the Indiana State Board of Medical Registration and Examination bears this out very clearly. We were besieged, on occasion we were hounded, to enforce this or that provision in the law, because of the shortcomings of this or that individual licensee. Seldom, however, did we have the cooperation of the complainants; too often they were willing to register the complaint but wanted the matter handled in such fashion that they would not appear in the picture. Within recent years, however, we have noted with no little satisfaction a tendency on the part of some of our county societies to clean house; in some instances they have gone about it in a most systematic style and have brought matters to a head in a very short time. In other instances, notably those occurring in some of our larger societies, there has been more or less talk but very little action. In the annual address of the retiring president of one of these larger groups, he spoke of a distinct violation of the local rules regarding contract practice, stating that some members of his society had been guilty of such practices and were so adjudged after an investigation. However, so far as we have been able to ascertain, the record shows no definite action taken by the society.

In another of our large societies there have been many occasions when a member has been covertly charged with a flagrant violation of some part of local medical law. These matters have been referred to the Council, there to meet an untimely death, principally because no one had the courage to press the charges.

The Indiana profession, as a whole, marks up to better than the average over the country, yet there is much room for improvement. We have been leading the procession in many things, notably our handling of the many economic problems incident to the depression; our State Association is generally accorded as being one of the best in the country and we have every reason to be proud of our records. However, we must do our part toward cleaning house; we must see to it that flagrant breaches of the code, things bordering on indecency of conduct, are abruptly checked.

### PROFESSIONAL ANESTHETISTS

A considerable number of our larger hospitals are at present concerned with a recent ruling of the Indiana State Board of Medical Registration and Examination regarding the administration of anesthetics by "hospital anesthetists, most of whom are graduate nurses." While it is true that practically all these nurses are especially trained in the art of anesthesia (and it is an art), the fact remains that the practice directly infringes on the rights of licensed practitioners of medicine.



We have known a good many anesthetists in our time, some of them of the nurse variety, and we are prepared to state that invariably they give a good account of themselves. But, as we have said, it is an open question whether any one other than a medical man should regularly administer anesthetics.

Under the present law there are two legal objections to the nurse system of anesthesia: the first is that most hospitals using this plan are, legally, engaged in the practice of medicine, in that they make a charge for this service, the nurse working either under the salary or commission plan; the second legal objection lies in the fact that the nurse so engaged is practicing medicine without a license so to do. In either event, we believe the Board of Medical Registration and Examination is correct in its present stand in the matter and that the Indiana medical profession will agree with that interpretation of our medical law. However, some of our larger hospitals, wherein nurses are engaged as resident anesthetists, maintain that their chief reason for so doing is that medical men are not available who have had sufficient experience in anesthesia, particularly the gas varieties. We shall have to admit that in many instances there is much of merit in such a contention, but that matter is easily remedied. If a hospital surgical service is sufficiently large to justify a resident anesthetist, it would seem a rather easy matter to persuade some staff member to equip himself for such service.

We dislike to use the terms "state medicine" or "socialized medicine" so frequently, but this is just another instance in which agencies outside our profession are doing a bit of chiseling; it is but another straw—and a rather heavy one—being laid on the back of the dromedary!

For one reason and another we rather suspect that the resident nurse anesthetist plan is not entirely a plan born of extreme necessity, nor is it entirely altruistic; we have a rather definite notion that matters pecuniary have quite a bit to do with it.

On the whole, we are quite in accord with the Board in this matter and shall watch with a great deal of interest the developments following its recent promulgation regarding anesthesia in hospitals.

#### MICRO-DYNAMICS IN INDIANA

It may be interesting to members of the Indiana profession to learn that at last the ultimate has been achieved, right here in our own State of Indiana. According to a recent advertisement in an Indianapolis newspaper, one C. Roland Perdue has possessed himself of the latest in diagnostic apparatus, the Micro-Dynameter, from which "nothing is hidden." According to the glowing advertisement, this marvelous invention not only "locates disease—acute, chronic, or hereditary—in any part

of the body," but proceeds to tell "what drugs or treatment will benefit you." As the Indianapolis Better Business Bureau quaintly remarks, "diagnosis is reduced to the simplicity of a nickel-in-the-slot gum-vending machine."

*The Journal of the American Medical Association* for February 17, 1934, carries an elaborate story of the doings of Dr. Perdue. A graduate of an Indiana medical school, some thirty-five years ago, his advertising carries the information that he has been located in Indianapolis for the past twenty-eight years; his Indiana certificate was granted him in 1903. In just what line he was engaged in the five-year interim, we are unable to ascertain. Of recent years his letter heads have carried the information that he is a "Dermatologist, Plasto-Cosmetic Surgeon, using x-ray therapy, Quartz Light Therapy, Electro-Therapy; Skin Lesions; Facial Blemishes; Facial Surgery."

Perdue seems to be a versatile sort of a chap, having adopted many of the various forms of healing that have appeared in recent years, such as "Tricho treatments," "Intermittent Chromatic Radiant Ray," and many others. It seems that he was also interested in the Hoxsey cancer cure which created no little furore not so many years ago; he is credited with being connected with an Indianapolis branch of this "system." As recently as 1932, Perdue is said to have endorsed a system known as the "Aetheronics" method of treatment. This was rather a unique system in that it is alleged that it was a sort of "absent treatment" project, the treatments being given by radio.

Came the year 1933, and Perdue is said to have enlisted in that group which maintained that the use of aluminum cooking utensils was productive of much trouble, alleging in particular that many stomach disturbances, including cancer, were directly traceable to this. Just what effect this propaganda had on the manufacturers of aluminum cooking ware, to say nothing of the Aluminum Corporation of America, is not hard to determine. This year, seeming to find it either advisable or necessary to ride a new hobby, Perdue has adopted the system of Micro-Dynamics, with all the mysteries surrounding it. What next?

#### MEMORIAL TO HONORED PHYSICIANS

On the evening of May 18th, there was celebrated at the James Whitcomb Riley Hospital a most appropriate and beautiful ceremony on the occasion of the unveiling of brass tablets placed in the floor of the hospital rotunda in memory of three revered physicians who played important roles in the early history of that hospital, and of medical education in general; namely, Doctors John H. Oliver, Lafayette Page, and Frank A. Morrison.

Preceding the unveiling, a short program was conducted on the campus in front of the hospital. President William Lowe Bryan called the meeting

to order and introduced Governor McNutt, who made a short talk. A memorial to Dr. Frank Morrison was read by Dr. John Cunningham; another to Dr. John Oliver was read by Dr. William P. Garshwiler; another to Dr. Lafayette Page was read by Dr. Louis Burckhardt. Following these impressive ceremonies, the audience assembled in the lobby of the hospital to see the tablets. As they passed through the front door they first saw a tablet with the following inscription: "THAT THEY MAY HAVE LIFE AND MAY HAVE IT ABUNDANTLY." Just beyond this, there was seen a central figure in brass, approximately six feet in diameter, and in the form of a cross with equal limbs. In the center of this design there are certain conventional medical symbols and in each limb of the cross there are four names of the great in medicine in days gone by. These sixteen names were chosen after considerable deliberation, and are as follows: Hippocrates, Avicenna, Galen, Pare, Vesalius, Harvey, Sydenham, Leuwenhoek, Jenner, Virchow, Koch, Pasteur, Long, Beaumont, Roentgen, and Walter Reed. Grouped about this central design are three smaller tablets, one each for the three local doctors who are honored. These tablets were cast in Indianapolis, and are the product of the artistic genius of Harry Inge Johnstone and Donald M. Mattison, both of the Herron Art Institute of the same city.

After viewing the tablets, the guests were entertained at dinner in the nurses' dining room of the Riley Hospital, approximately 250 guests being present. Among the honored guests were the Governor of Indiana, the President and Board of Trustees of the University, and living members of the families of the men being memorialized. After a delightful dinner, Mr. James W. Fesler, President of the Board of Trustees of the University, introduced Reginald Sullivan, Mayor of Indianapolis, who spoke of the value of the Medical Center to the city. Benjamin F. Long, Trustee of Indiana University, accepted the tablets in the name of the University and expressed his appreciation of the honored physicians and their colleagues. Hugh McK. Landon, President of the Riley Committee, expressed his happiness in having been able to serve the children of the state through the hospital. As the meeting was being dismissed, a touching episode occurred when Mrs. Page, the widow of Dr. Lafayette Page, expressed for herself and the other relatives, the heartfelt appreciation which they felt.

In times past it was customary to honor physicians very highly indeed. Sometimes in more recent years we have been inclined to forget too quickly, in the press of busy careers, these little touches which do so much to enrich our lives and our surroundings. It is to be hoped that ceremonies such as this one will do much to correct such a situation. It will be well frequently to remind ourselves and the medical students of the future of the honored great who have passed.

## EDITORIAL NOTES

IF your dues are not paid you will not receive the July issue of *THE JOURNAL*.

DON'T forget the annual meeting of the American Medical Association at Cleveland, June eleventh to fifteenth.

RECENTLY some business firms and some physicians, as a measure of economy, sent out monthly bills on the double government postal cards. An order of the postoffice department declares this practice to be not permissible. If any of our members are contemplating this plan of economy, we hope this note of warning reaches them in time to prevent a useless expenditure for postal cards.

THE American Medical Association will meet in Cleveland, June eleventh to fifteenth, with headquarters at the Cleveland Public Auditorium. The program indicates unusually worth-while attractions. With Cleveland as close to Indiana as it is, there should be a large representation of Indiana physicians. All who can should attend. You cheat yourself if you do not go when it is possible for you to do so.

At the time of going to press, approximately one hundred physicians had registered in Indianapolis for the two-weeks' postgraduate course given by the Indiana University School of Medicine. Probably twice that number of aggressive physicians will register before the period ends. If you are not attending any part of this postgraduate course, which ends June second, you are missing an opportunity for your own advancement which is seldom equalled.

WHEN purchasing insurance, every individual is free to choose for himself the type of contract and company which he believes best can serve his desires. Within recent years a few small companies have been established which offer low-rate contracts for health and accident coverage. A careful investigation of the standing and methods of operation of the companies considered when buying an insurance contract should be a routine practice for safety and satisfaction.

THE Ninth District Medical Society has a novel way of attracting attention to its meetings. In



announcing the meeting set for the Clinton County Hospital, at Frankfort, a post card was sent to the wives of members, asking them to "Bring the good doctor and come to our doins." The reverse of the card carries a picture of the hospital. In all, it is a very clever conception, credited to Dr. C. A. Burroughs, chairman of the reception committee.

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DR. N. K. FORSTER, secretary of the Tenth District Medical Society, waxes something or other when he concludes the announcement of the May meeting thusly: "Clear away the psoriasis of your troubles, stimulate the eczema of your lethargy, shed your winter itch, scratch the scabies on your old pocket-book and lay aside a yeast infected bill. Meet the Tenth District members and be inoculated with the virus of good food, good fellowship, and a good program." In other words, get rid of the winter itch and hike over to Valparaiso for a good dinner and an excellent program.

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WITH the passing of Dr. William H. Welch on April thirtieth there remains but one of the famed Johns Hopkins group, commonly referred to as "The Four Doctors"—Welch, Osler, Halsted and Kelly, only the last surviving. Dr. Welch is credited with having brought to Hopkins the science of bacteriology, he having at one time been a student of Koch and Pasteur. His eightieth birthday, in 1930, was the occasion for celebrations in various parts of the world, for he was generally credited with being probably the foremost pathologist of our time. Dr. Welch was the recipient of some sixteen honorary degrees, many of them from foreign countries. He was truly a great man and one who will be sorely missed.

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EVERY member of the Indiana State Medical Association will be interested in the fact that the 1935 convention of the American Medical Association probably will be invited to meet in Indianapolis. The invitation is being sponsored by the Indianapolis Medical Society and the Indiana State Medical Association. The convention bureau of Indianapolis points out that, contrary to an opinion which has existed for several years, Indianapolis does have the necessary facilities to entertain this convention inasmuch as hotels and clubs offer approximately 7,500 hotel rooms and the Murat Theater and Shrine Temple can care for the large meetings. If you are acquainted with delegates to the A. M. A. from states other than Indiana, use your influence to have them support Indiana's invitation. A list of these delegates from other states appears on page 1567 in the May twelfth issue of *The Journal of the American Medical Association*.

WE feel that due credit should be given Dr. A. W. Cavins, Terre Haute, for the clever manner in which he portrayed information regarding representation in the A. M. A. family, in the May number of *THE JOURNAL*. In the current number, Dr. Cavins presents another phase of the picture. He has also prepared maps, graphs and charts (to be published later) having to do with papers presented at our own meetings by various members over the state. Dr. Cavins is officially listed as the statistician of the Association, but we feel he is entitled to a bit more credit for this work than an obscure listing in the official family. We know something of the time and energy he has expended in the preparation of these reports and we extend to him the heartiest thanks of the Association.

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WE have been deeply interested in comments, both professional and lay, regarding the activities of what we continue to call our State Board of Health. (We prefer to use this title since our eastern friend of the Milbank Foundation, John H. Kingsbury, announced to the wide world that Indiana had abandoned her State Board of Health!) These comments are invariably to the effect that Harvey, Rice and their assistants are carrying on in a most commendable fashion. We have had occasion to talk to a number of those connected with the Division, each of whom is hyper-enthusiastic about the work and the results accomplished. When we consider the fact that more work is being done than ever before, and better results are being obtained, with a saving of some one hundred thousand dollars annually, we may well be proud of this group.

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THE Indianapolis *Star* for May twenty-third tells of the establishment of the Medical and Dental Business Bureau, Incorporated, in Indianapolis, sponsored by the Indianapolis Medical Society and the Indianapolis Dental Society. The purpose of the Bureau, under the plan of the societies, is to assure the employed man and his family of receiving medical and dental care at a price corresponding to income and payable in a systematic way. The bureau ascertains what amount the patient can afford to pay and arranges a deferred payment plan when payments cannot be made in lump sums. The two professional societies, through their business bureau, become a co-ordinating center for the middle class wage earner and his family who are in need of, but feel they can not afford, medical and dental services at customary rates. If the plan is successful in Indianapolis, undoubtedly it will be valuable in other Indiana communities.

SOME time ago we editorialized a bit on the decadence of prescription writing, setting forth our belief that too many medical men found it more convenient to prescribe a proprietary rather than essay a more formal prescription. Judging from comment on the subject in the lay press it seems that Dr. Virgil E. Simpson, editor of the U. S. Pharmacopoeia, had somewhat to say on the subject at a recent meeting of the American College of Physicians, in Chicago. Dr. Simpson is credited with having laid the blame for the high cost of medicines on the doctors, declaring that they all too commonly "prescribe a patent remedy of the same general nature, prepared and sold under a trade name by a drug supply company." We shall have to agree that there is quite some merit in his accusation; as we have said before, too many of our folks have forgotten their *materia medica*, therapeutics and pharmacology, and are content with accepting from detail men what is declared to be the "latest thing in treatment."

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*A Little More on Radio Ballyhoo.* With increasing frequency one is almost moved to tears by a compassionate voice over the radio wishing to share his patent medicine with some poor sufferer. The list of such advertisers is daily growing larger. The writer has often wondered why these remedies did not sweep the country, that is, if they are really so useful in combating disease. Advertising would seem almost superfluous. Insulin and liver were not brought to the attention of the public by radio and yet both were used universally in an incredibly short space of time. The best advertising for medicine, therefore, would seem to be through the medical profession itself. Of course the drug would of necessity have to be of definite value. The medical profession, by its definite contact with the public, has a powerful weapon to make ineffective and expensive the advertisements of drugs of doubtful value. A few words of caution by a physician will go a long way in deterring a prospective purchase of a nostrum.—*Rhode Island Medical Journal*, May, 1934.

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DO YOU plan to attend the Cleveland session of the American Medical Association? If so, do not fail to visit the Exhibit of the Indiana State Division of Public Health which will be conducted by Drs. Verne K. Harvey and Thurman B. Rice, who will be in attendance during the session. The exhibit booth will be directly beside that of the Bureau of Public Health Education of the American Medical Association. Great interest has been expressed in this exhibit, and our Indiana State Division of Public Health, through Dr. Harvey and Dr. Rice, will make every effort to have a successful display. Assist them as much as possible; convince attend-

ants at the session that the Indiana State Division of Public Health really does have the approval of organized medicine. How? By visiting the exhibit booth as often as convenient—make yourselves known, and talk with other visitors. The exhibit will consist of a number of diagrams, showing the organization of the Indiana Plan. One chart, approximately five feet long and four feet wide, will be reproduced in colors. We repeat: if you go to Cleveland, do not fail to visit the exhibit of the Indiana State Division of Public Health.

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FEW doctors in general practice have not had patients who admitted or boasted of using Marmola as a reducing agent. Physicians will be interested in the release by the United States Department of Agriculture issued August 28, 1933, which contained (among other things) the following statement concerning Marmola: "Marmola may be cited as a striking example of a dangerous flesh reducer. This preparation contains, among other ingredients, thyroid extract and bladder-wrack. Both substances tend to increase the activity of the thyroid gland and, when taken by a person whose thyroid is already overactive, their administration may cause sweating, fevers, delirium and, in unusual instances, even death. The Supreme Court of the United States in a decision adverse to the action taken by the Federal Trade Commission against this product said: 'The findings supported by evidence warrant the conclusion that the preparation (Marmola) is one which cannot be used generally with safety to physical health except under medical direction and advice.'" This information has been published in several issues of the Indianapolis Better Business Bureau *Bulletin*.

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UNDER the caption "Sinus Trouble Contracted in Dirty Streams," the Indianapolis *Times* recently published an article of interest to the medical profession. The writer heads his article with what purports to be the statement of the physician to whom he had gone for relief from a sinus infection, the physician being quoted as saying, "Yes, you are living in the sinus belt, Mr. Collins." The physician is further quoted as having said that we have more eye, ear, nose and throat men in this section than in any other part of the country, because of our polluted streams. The writer proceeds to cite the fact that a short time ago a veritable epidemic of septic sore throat had its apparent origin in bathing in the waters of the Wabash, adjacent to a central Indiana city. Another "interesting" statement is that there are 570 miles of grossly polluted rivers in Indiana. He refers to Sugar Creek, a most delightful central Indiana stream, and he says



that where it flows through Turkey run park, the water appears cool and inviting, yet only last summer the bacillus coli count was something like 120,000,000 per cc. Something must be done to clean up our lakes and streams, one of the most important of our natural resources; pollution by raw sewage and industrial wastes must be curbed; these points of scenic beauty, Indiana's vacation land, must be preserved, and in the preservation we must make them healthful spots rather than sources of the most dangerous infections.

NEVER before in the history of our medical organizations have there been as many problems of vital importance to the profession, collectively and individually, as confront it at the present time. As usual at the time of the annual session of the national organization, the American Medical Association, these various perplexing questions will be presented for discussion and undoubtedly plans will be made to cope with them at the Cleveland convention which will open June eleventh. The lethargic attitude of physicians toward these questions has changed radically within the past few years, and there is apparent a very real interest in the activities of all medical organizations, most of which are energetically experimenting with one plan or another in efforts to stem the tides which threaten the individuality of medical practice. Reports of actions considered and taken at the Cleveland meeting will appear in subsequent issues of THE JOURNAL and we urge every physician to read and think about the problems which are his own and in the solution of which he should take an active part.

AN eastern "Fashion Bureau" has reached the height of something or other in the matter of advertising. In a circular letter addressed to one of our members, the "Bureau" stresses the point that green is to be the prevailing fall color. It seems that the "Bureau" wishes the reaction of medical men to this color when the letter says, "Be that as it may, we are in a position to predict confidently that a great deal of Green, probably in the olive and bluish shades, will undoubtedly be worn this fall, and since this is so, we should very much like to learn what has been your experience with the affective value of this color, either in relation to the optic nerve, or upon people's psychology."

"If you would care to write us any comments you may have on this subject, for publication, we would be most interested and appreciative and would plan to prepare a symposium including your comment, with those of other medical and scientific authorities.

"For your convenience in reply a stamped envelope is enclosed, and in the hope that you may find this little inquiry on fashion perhaps a change from the more serious aspects of life, I am," etc.

Well, this is just another one of those things!

\*THE most spectacular event in Indiana political history since we first began to vote in 1896, was the recent state-wide primary. It was spectacular because of the veritable army of candidates whose mad scramble for political preferment provided the populace with enough excitement to last until the fall elections. So great was the number who filed that statisticians began to make all sorts of graphs, charts and what-nots; about the only thing we failed to note in the Indiana press was a statement to the effect that the candidates, if laid end to end, would extend from one given point to another; we are told that there was one candidate to every square mile of territory in the state, and in Lake County some enterprising genius arrived at the rather startling conclusion that we had a live candidate for every forty-three persons within the county! At times the scramble was so great that candidates solicited one another, which reminded us of prohibition times, when bootleggers were so numerous that they tried to sell one another. On the whole the present primary seems to have furnished plenty of argument for either a change in the system or substituting the old convention plan of nominations of candidates.

LOGAN CLENDENING does a rather good bit of writing of medical articles for lay consumption. His book, "The Human Body," is very well done and should be productive of much good. It seems that the good doctor has gone in for a syndicated "health column," with which we have no fault to find since, as we have said, Clendening does a very good job of it. However, in a recent article on "pyelitis" we feel that he is overstepping the bounds of medical propriety. His brief discussion of the subject is very good, but we do take exceptions to his advice as to treatment. He says, "The treatment which is productive of the best results is to give an antiseptic preparation, which excreted in the urine will kill the germs which cause the infection at its source. There are many substances of this kind, one being hexymethaline. The best ones are dyes, such as acroflavine. *Elaborate, expensive treatment usually is a mistake.*" This amounts to self-diagnosis and self-treatment, with neither of which are we in accord. In fact, we are more than surprised to note that a man of the standing of Dr. Clendening should openly advise self-treatment of so serious a condition as pyelitis. Nor do we overlook the fact that he decries the use of "elaborate, expensive treatment." True it is that some of the procedures found necessary by our urologists are rather expensive, yet the fact remains that pyelitis is by no means a simple, innocuous thing; all too frequently it is a most serious condition, one that demands meticulous care in its management. We trust that Dr. Clendening will not continue his health advice along present lines.

## THE PRESIDENT'S PAGE

Our Graduate Educational Course at Evansville was in every respect successful. The work of our Committee on Graduate Educational Work has been eminently satisfactory, and for this I am sure every member of the State Association is grateful and appreciative.

The interest, the enthusiasm, and the hospitality of the Vanderburgh County Medical Society along with the other counties of the first district, are things to warm the hearts of the most pessimistic. There were one hundred thirty-five physicians registered for the course, and we have had nothing to indicate that any of them were disappointed.

The outstanding feature, as it should be, was the intensive and interesting program put on largely by Indiana men. This began at 9:00 a.m. and without discussions the various subjects were presented in succession until 10:00 p.m. The interest was good and those present felt that the time was well spent.

This may be repeated in any county of the state, and we are hoping for bigger and better meetings each year. It is your opportunity, and you know a real physician never ceases to be interested in those things that make him better able to serve his public.

### OUR COMING ELECTION

Out of the jungle of a primary election, our candidates have emerged. They are doubtless an average cross section of society. There are among them men and women quite able to carry on for the good of all of us. Our profession has now reached the place where it takes more than a passing interest in legislative affairs. This is as it should be, for who occupies or should occupy a more important place in the affairs of his community than the physician?

Present appearances indicate that we are likely to be confronted in the next legislature by some questions that will need our immediate and earnest efforts. The time to start these efforts is now, between the primary and the fall election.

### CULTS

The cults, like the Lord's poor, we seem to have with us always. At the present time they appear to be divided into three camps.

First, there is the regular chiropractor who believes in laying on of hands only, and he wants a separate board.

Second, there is the group headed by those interested in our chiropractic schools. These, it appears, will renew their efforts to have their graduates made eligible to take our state board examination.

Third, there is a conglomeration of drugless healers who want the right to use various appliances, electrical and otherwise, that are more or

less in use by the medical profession, but these healers do without the formality of complying with the legal requirements for the practice of medicine. Needless to say, they also would like a separate board.

These appeals are not new, and we hope to be able to continue, as in the past, to convince those elected that we have a medical practice act in Indiana that is eminently fair to anyone who honestly wishes to practice the healing art.

### LEGISLATION

There is another field that may call for our attention in no uncertain manner. Nearer and nearer seems our approach to various schemes that smack of socialization of medicine. True they come labeled as health insurance, sickness insurance, group hospitalization, etc., but back of them all, if one stops to investigate, is the idea of mass treatment of the public, which once established will lead to the employment of the doctor in some form of contract practice. As soon as this comes, the relation of physician and patient goes, and the right of the patient to choose his own physician is lost. It is not at all impossible that some such scheme may present itself in the form of a bill in our next legislature.

Now is the time to complete your organization. The State Association has a live legislative committee, and one not new to this kind of work. We hope no county society in the state will approach this election without an actively interested legislative committee. Remember that your influence can and should be felt in every family in the state. It is an easy matter to learn how certain men stand in regard to regular medicine, regardless of politics. It is the hope of all of us that we may have the same cooperation in the 1935 legislature that we have had in the past three or four sessions, for "In union there is strength," and in cooperation there is accomplishment.

Stick closely to your county society. You will be kept informed of developments from time to time through headquarters office. Never was a united front more to be desired than now.

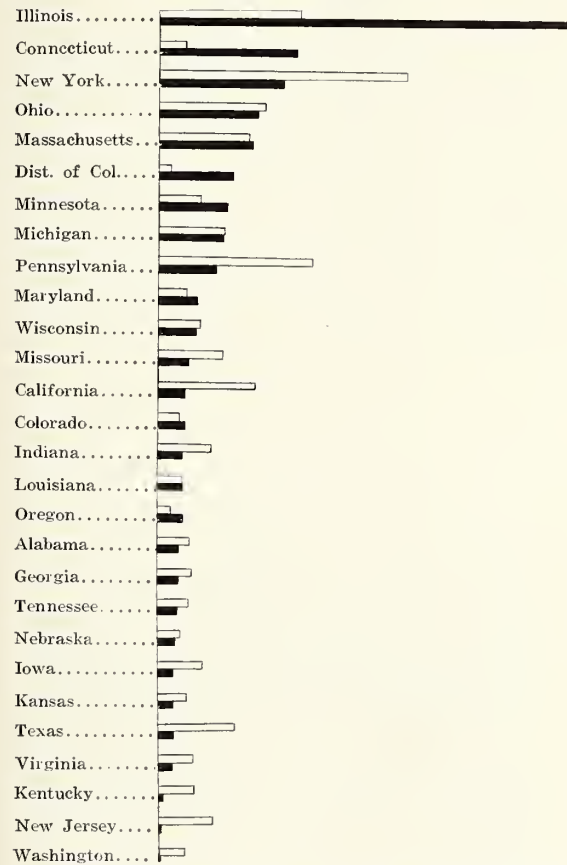
Please save twenty-five cents out of your cigarette money. Take that quarter, go down to the corner drug store, and buy a copy of *American Mercury* for May, 1934. Turn to page 67 and read the article on the subject, "The Plight of the Doctor." This is written by a layman, George W. Aspinwall. The facts appear to be sound and the idea is certainly plain. It should and will give you reason for reflection.

*E. E. Padgett.*



THE OFFICERS OF THE AMERICAN MEDICAL ASSOCIATION

BAR GRAPH BASED ON A TABLE PUBLISHED IN THE MAY ISSUE OF THIS JOURNAL



This graph is intended to show the relation between the numbers of officers of the A. M. A. supplied by the various states (and the District of Columbia) during the ten-year period of 1924-1933, and the number of members in the corresponding state medical societies. For convenience the number of members in each state society is taken from the A. M. A. Medical Directory for 1931, while the number of A. M. A. officers is taken from the table published in May.

The unit of length of each black bar represents one officer in the A. M. A., while the unit of length of each white bar represents 100 members of the medical society of that state.

It will be noted that there are 27 states and the District of Columbia on this chart. None of the other states was represented in the official organization of the A. M. A. during the period covered by this analysis.

AN ANALYSIS OF THE TABULATION

While the tabulation\* of officers and committeemen of the American Medical Association over a ten-year period speaks pretty well for itself, further analysis has brought out some very interesting points.

It is well known that mere tabulation of data is only the first step in approaching a problem from the statistical point of view, and while the data as published have interested me a great deal, I

have been doing a little figuring since the May issue appeared with the results given herewith.

If all the states (including the District of Columbia) are listed numerically according to the number of officers they have supplied the A. M. A. during the period 1924-33, it is readily seen that 24 supplied more than 7 and 24 supplied less than 7. Of those showing less than 7, only 3 have supplied any at all, leaving 21 states which have had no recognition in the matter of officers or committees for a ten-year period. Twenty-seven states and the District of Columbia have supplied all of the officers and committees for this period; but as if this were not enough, the distribution among these 28 has not been entirely equitable. That this is so is brought out by the table and graph, each of which shows the same thing in a different way.

	Number of officers in A. M. A. from each state over a 10-year period.	Ratio of first column to total number of officers of A. M. A. over a 10-year period.	Membership of the state societies, 1931 directory	Ratio of state membership to A. M. A. membership 1931. (48 states and the D. C.)
Illinois.....	212	26.9 %	7,371	7.45 %
Connecticut.....	71	9.0 %	1,396	1.41 %
New York.....	65	8.2 %	12,846	13.01 %
Ohio.....	51	6.4 %	5,547	5.62 %
Massachusetts.....	49	6.2 %	4,671	4.73 %
Dist. of Columbia..	39	4.9 %	645	0.65 %
Minnesota.....	36	4.5 %	2,266	2.29 %
Michigan.....	34	4.3 %	3,435	3.48 %
Pennsylvania.....	30	3.8 %	7,973	8.07 %
Maryland.....	21	2.6 %	1,490	1.51 %
Wisconsin.....	20	2.5 %	2,203	2.23 %
Missouri.....	16	2.0 %	3,361	3.40 %
California.....	14	1.7 %	5,019	5.08 %
Colorado.....	14	1.7 %	1,114	1.13 %
Indiana.....	13	1.6 %	2,775	2.81 %
Louisiana.....	13	1.6 %	1,296	1.31 %
Oregon.....	13	1.6 %	685	0.69 %
Alabama.....	11	1.4 %	1,672	1.69 %
Georgia.....	11	1.4 %	1,763	1.78 %
Tennessee.....	10	1.3 %	1,647	1.67 %
Nebraska.....	9	1.1 %	1,196	1.21 %
Iowa.....	8	1.0 %	2,308	2.34 %
Kansas.....	8	1.0 %	1,537	1.56 %
Texas.....	8	1.0 %	3,835	3.88 %
Virginia.....	7	0.9 %	1,830	1.85 %
Kentucky.....	2	0.25 %	1,866	1.89 %
New Jersey.....	1	0.13 %	2,807	2.84 %
Washington.....	1	0.13 %	1,368	1.39 %
Totals.....	787		85,922	
Total membership of state societies not represented by officers in A. M. A. for entire 10-year period.....			12,976	13.12 %
Total, 48 states and D. C.....			98,898	

In the table it is attempted to analyze the distribution by comparing the number of officers supplied by each state to the total number of officers required to run the A. M. A. during these ten years. This gives the percentage of the total number of officers supplied by any state, as shown in the second column of figures. The last column gives the relationship, in percentage, of the membership of each state society to the total membership of the 48 states and the District of Columbia. If a perfect degree of equality of distribution obtained, the figures in the second and fourth columns would agree. While it is realized that for many

\* Jour. Ind. St. Med. Assoc., May, 1934, p. 227.

reasons, chiefly practical, such perfection is unlikely ever to be obtained, nevertheless instances such as that of New Jersey are difficult to explain. It is to be remembered that this table applies only to the 28, still leaving 21 out in the cold, except as noted at the bottom where the membership of those 21 states is seen to be 13.12% of the total. This is more than one-eighth.

The graph attempts to show visually the lessons of the table. Black and white bars are both made to the same unit of length. The number of units in each black bar represents the number of officers or committeemen supplied by that state during the ten-year period, while each unit of length in a white bar represents 100 members in the state society. For instance, in the case of Indiana, the black bar is 13 units long and the white bar, 27.75 units long. It is thus seen that taken together each pair of bars shows the number of officers supplied the A. M. A. for every hundred members of the state society. It must be borne in mind that 21 states are not shown at all on the graph.

Conclusions: Draw your own.  
A. W. CAVINS, M. D.,  
Terre Haute.

DIPHTHERIA REPORT FOR APRIL

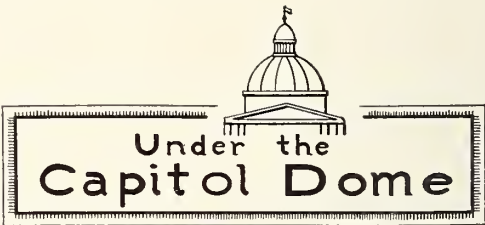
We are most happy to report that there was but one death from diphtheria for the entire state of Indiana during the month of April. This compares with figures for the corresponding month of other years as follows: In 1930 there were seven deaths; in 1931 there were eleven deaths; in 1932 there were nine deaths; and in 1933 there were six deaths.

We believe that the record for this month is the lowest ever to have occurred in Indiana. For the month of May, 1931, there were no deaths reported, but at the end of the year it was found that a mistake had been made, and that there actually had been one death for that month. This means then that already this early in the season we have equalled the best previous month in the history of Indiana. Of course, it is too early to shout, "Hallelujah!" but it looks as if we might be justified in saying that this good record is probably the first fruit of the immunization campaign.

The total number of deaths from diphtheria for the first four months of this year is now thirty-six. For the corresponding period in 1933 there were forty-seven deaths; in 1932 there were sixty-two deaths; in 1931 there were fifty deaths; and in 1930 there were fifty-three deaths. Spencer County was the one county which prevented us from having a perfect record in April of this year.

Below is given a list of the counties which have already reported deaths from diphtheria in 1934:

County	April 1934	Total for 1934
Allen	0	4
Blackford	0	1
Delaware	0	1
Gibson	0	1
Grant	0	1
Greene	0	1
Harrison	0	1
Jackson	0	2
Knox	0	2
Lake	0	2
Lawrence	0	3
Marion	0	3
Martin	0	1
Montgomery	0	1
Perry	0	4
Spencer	1	2
Warriek	0	1
Vanderburgh	0	2
Vermillion	0	1
Wayne	0	2
Total	1	36



Tax figures concerning the incomes of Indiana physicians for the year 1933 are not yet available. It is hoped that the compilations will be completed in time for our July issue.

NUDISTS

The prime purpose of a proposed nudist colony near Warsaw, Kosciusko County, is to promote the health of the colony's members according to a letter recently sent to Philip Lutz, Jr., Attorney General, by George H. Oliver, president of the Indiana Outdoor Club, which is sponsoring the contemplated colony.

Official Indiana, however, is opposed to the establishment of the colony regardless of whatever benefits may be derived by nudists. While admitting the value of sunshine as a health restorative, the Attorney General declared that Indiana laws prohibit the exhibition of the human body in the nude where several persons congregate, as in a nudist colony. He declared that if the courts will sustain his position he will call upon prosecuting attorneys and judges to aid in prohibiting any colonies of that nature within Indiana until the state legislature legalizes their establishment and operation.



A nudist colony was in operation in Newton County last year until its operations were halted by a court injunction. The Newton County colonists again are seeking to open their camp and the Attorney General is preparing to fight it.

#### EXAMINATIONS OF BARBERS

A second series of district examinations for applicants seeking barber and haircutters' licenses in Indiana was held during the past month by the State Board of Barber Examiners. Health certificates from recognized physicians are required of applicants for the barbers' licenses and applicants are turned down for transmittable diseases. Applicants failing to pass the examination on the first series of examinations were permitted to take the second examination, but no further examinations will be permitted according to Frank McKamey, secretary of the barbers' board.

#### HOSPITALIZATION OF TRANSIENT INDIGENT

Township trustees are authorized to pay for hospitalization of indigent transient persons according to an opinion of Philip Lutz, Jr., Attorney General. The opinion was written for Edward E. DiBella, director of transient activities of the Governor's Commission on Unemployment Relief.

Under the rules and regulations of the Federal Emergency Relief Administration, organizations supported by funds distributed by the administration may not pay for hospitalization of indigent clients, but laws regulating township trustees are broad enough to permit medical care to be given the transients. Under provisions of the statute the township trustee would be warranted in giving whatever relief in his judgment was necessary, the Attorney General held. The Attorney General said, in his opinion, that the transient bureau may recommend hospitalization upon recommendation of a registered and licensed physician employed by the bureau or the trustee would be warranted in paying for hospitalization upon a recommendation from any reliable source.

#### DIVORCES IN INDIANA

Adultery was the cause of 4.4 per cent of the divorces granted to men in Indiana last year according to a recent report of the State Statistical Department of which Albert E. Dickens of Princeton is head. The number of divorces granted to women on grounds of adultery was so negligible that no percentage was shown.

Abandonment accounted for 6.5 per cent of divorces granted to wives and for 25.3 per cent of those granted to husbands. Cruelty was the basis for 79.4 per cent of the divorces obtained by wives and 70.3 per cent of those obtained by husbands. Failure to provide accounted for 14.1 per cent of the total divorces granted to wives.

There were 6,880 divorces granted during the year; marriages totaled 42,459. The number of marriages represented a 15.7 per cent increase over the preceding year, while the divorce rate increased 1.4 per cent over the preceding year.

In connection with the causes ascribed for divorces the statistician said: "The statistical presentation of the principal causes for the divorce action should not be too seriously considered, however, for the legal cause may or may not be the true cause underlying the action for divorce. The divorce action is frequently brought in the name of the cause easiest to prove or in the name of the cause which is less apt to damage the reputation of the parties concerned. It has been estimated that about one-third of the divorced people remarry."

The Governor's Committee on Unemployment Relief, on recommendation of a Nursing Advisory Committee, is continuing the assignments of some nurses to do public health work for a two-months' period. These nurses, for the most part, are untrained in public health nursing, and to meet their requests for training and instruction in its principles the Public Health Nursing Bureau is planning a series of one-day institutes to be held weekly in each of four districts in the state. Physicians are invited to attend the institutes in their districts and to proffer criticisms and suggestions. Complete information concerning the work is available from the Bureau of Public Health Nursing, Division of Public Health, Indianapolis.

### SECRETARIES' COLUMN

#### 100 PER CENT SOCIETIES

Benton County Medical Society  
 Carroll County Medical Society  
 Fountain-Warren County Medical Society  
 Hancock County Medical Society  
 Lawrence County Medical Society  
 Switzerland County Medical Society

In Los Angeles the Ross-Loos Clinic has been put on the spot by the Medical Society.

This clinic or group practice, which it really is, has been taking care of people for two dollars per month. They have a list of 15,000 families. They employ 55 physicians and 110 other attaches, maintain an ambulance service, maintain doctors in nearly 20 nearby towns and are responsible for the care of 50,000 people. This controversy has nothing to do with their professional responsibility.

Their clinic was one of the clinics used by the committee on the cost of medical care, and was cited in the majority report.

Charges are made of "solicitation, advertising, fee splitting and other unethical practices" and particularly with violating a section of the medical code which declares it unprofessional for a physician to "dispose of his services under conditions which interfere with reasonable competition among the physicians of a community." "On a basis of these charges, which Drs. Ross and Loos categorically deny, they were dismissed from the county medical association," according to the *N. Y. Times*.

The physicians involved have retained an attorney who is preparing an appeal to the State Medical Association, and have announced their determination to carry the case, if necessary, to the American Medical Association for final decision.

The *N. Y. Times* further says, "The question of license is not involved in the current proceedings but should the decision of the county association be sustained, hospital privileges may be withdrawn and pressure brought to bear upon members of the group staff affecting their standing as 'ethical' practitioners. There is no question that the medical associations are a potent influence within the profession and the outcome of the case, which may eventually find its way into the courts, is of first importance not only to the profession itself but also as a basis for defining how far such paternalism may go and what may be expected in the fast developing tendency throughout the country towards health insurance and state control of the practice of medicine and surgery."

The medical society is going to fight it out with Drs. Ross and Loos, who say they will fight to the last ditch.

This is an important case for the A. M. A. to decide. Upon the decision of the A. M. A., our leader, the future of the practice of medicine rests.

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In the 1934 report of the board of trustees, as published in the A. M. A. Journal, was a statement to the effect that a field representative was not necessary, that he could not cover the territory, and that the expense would not be justified. I disagree with that attitude. If the A. M. A. had a missionary who could go around and show the evils of group practice and the good of individualism, he could also keep doctors' thoughts in the same channel; then these unpleasant situations would not arise. The big trouble today is that too many doctors think as individuals and not as medical societies. Keep medicine a profession.

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The postgraduate course of instruction held at Evansville in April was a success. The talks were very instructive. It is up to the committee to put on a bigger and better course next year. Success to them.

How many of you were successful in getting candidates favorable to the medical profession nominated? If there are any in your community who were nominated and are not for your profession, you should know what to do before November.

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At this time of the year people begin to travel around the country in their automobiles. Now is the time to educate these travelers that they should be careful where they eat and where they drink.

A. M. MITCHELL, *Chairman*.

## VOICE OF THE DOCTOR

April 10, 1934.

My dear Journal:

You have been well cared for since I left the State Medical Association you have the great honor to represent. I remember when you supplanted the annual bound volume of the Association's transactions. There are a few of those old souvenirs in my library still. How vividly I recall the fiftieth anniversary of your Association. The voice of that grand old man, Dr. Wishard, still echoes in my memory. From your Association I drew inspirations that still abide.

For a time I had the gratification of being associated with the late Miles F. Porter and your late editor, Albert E. Bulson. I never missed a meeting. It was the example of Porter and Bulson that made it so. And the day I read my first paper before your Association! The sweat that was on me from the phobia of it, but I was young then and youth should be self opinionated, and I was. It concerned irrigating the colon in typhoid fever. One of the discussants said it was old stuff in Germany and my heart was unhappy, but I had read a paper before the Indiana State Medical Association! That was something!

Those who have made you what you are—a journal second to no other state journal—have been kind enough to let me have a copy of you each month. That is why or how I came to know you had and have been well cared for. You reflect credit on those who have had the planning of your future. Despite this, that is, despite the glory that has been given you, there have been times when you made me sad—sad and lonely—none more than when your type told of the death of Bulson, and a little later of Porter.

If I am reading you right, and I feel quite sure that I am, the old Association is not as it was. Often I am, while reading you, asking, "Where is the Spirit of '96"—'96, mind you, not '76. It was the year I began my so-called professional career. It was in dear old Indiana. Why, for a time, I



served under the late John N. Hurty on the State Department of Health.

I see that many of your subscribers are restless. They are troubled over the economic condition of the profession. But that is not to be taken seriously, for, indeed, it was ourselves who made it so. In time we will be seeking our normal level. And while it is general in its spread, I cannot look back and recall what the doctors of Indiana were in '96 without the feeling that the spirit cannot and will not down.

Hail Ye of the Association of my early guidance and inspirations!

J. CHRISTOPHER O'DAY, M. D.  
Honolulu, Hawaii.

#### A CASE FOR DIAGNOSIS AND TREATMENT

The following letter, copied exactly as received, was sent to an Indiana physician recently:

Mar. 14, 1934

Dr i have been very sick with that Gas on the stomic and bowels it went into cramps last night, and i sure thought i wouldn't be here this morn and finly i went to thowning up and looked and tasted like my Gauld had run over, then it turned down on me and worked me all night and still this morning and it is in my sholder so i cant move my neck and hardly my hand i so week and i have fever so i want something will ease me i can't sleep, i so sore in my sholder and something ease that sholder i can't lay down for it is in my neck and sholder so i don't think there any thing left in me i was poison from my Gauld i think i thew up ever 15 minutes for about 3 hours then it turn down on me i still have gas on my stomic and can't eat a bite for it.

#### DEATH NOTICES

FRANK TOWNSLEY, M. D., of East Chicago, died recently, aged fifty-five years. Dr. Townsley graduated from the Indiana Eclectic Medical College, Indianapolis, in 1909.

C. B. PENDLETON, M. D., of Markleville, died April seventeenth, aged eighty years. Dr. Pendleton graduated from the Physio-Medical College of Indiana, Indianapolis, in 1892.

A. H. RALSTON, M. D., of Fredericksburg, died May first, aged seventy-four years. He was a graduate of the Louisville Medical College in 1897.

DAVID DETAR, M. D., of Winslow, father of Dr. George B. DeTar, died recently. Dr. DeTar was eighty-eight years of age.

HOMER J. HALL, M. D., retired physician of Franklin, died April twenty-ninth, aged eighty-two years. Dr. Hall graduated from the University of Louisville School of Medicine in 1877.

B. V. CANFIELD, M. D., of Indianapolis, died April twenty-seventh, aged sixty-nine years. He graduated from the Central College of P. and S., Indianapolis, in 1890.

SAMUEL WITHAM, retired physician of Fortville, died May seventh, aged eighty-four years. He was a graduate of the Medical College of Ohio, Cincinnati, in 1879.

T. J. SWANTZ, M. D., of South Bend, died in May, aged fifty-five years. Dr. Swantz had practiced medicine in South Bend since 1907 following his graduation from Northwestern University Medical School, Chicago, in that year. He was a member of the St. Joseph County Medical Society and the Indiana State Medical Association.

JOHN N. TAYLOR, M. D., of Crawfordsville, died April twenty-sixth, aged eighty-four years. Dr. Taylor was an honorary member of the Montgomery County Medical Society. He served as city health commissioner of Crawfordsville for a number of years, and at one time was the homeopathic representative on the Indiana State Board of Medical Registration and Examination. He graduated from the Indiana Medical College, Indianapolis, in 1876.

#### HOOSIER NOTES

DR. W. G. PIPPENGER, of Camden, has moved to Lafayette.

DR. O. M. GRAVES, of Princeton, recently had his appendix removed.

THE American College of Physicians will hold its 1935 meeting in Indianapolis.

THE regular meeting date of the Hendricks County Medical Society has been changed to the fourth Friday of each month.

DR. AND MRS. J. A. FLORA, recently of Flora, have moved to Kingsport, Tennessee, where Dr. Flora will practice.

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DR. ORA L. MARKS has become associated with Dr. George F. Bicknell in the practice of medicine at East Chicago.

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DR. S. E. MCCLURE, of Monon, and Miss Marian McGowan, of Mankato, Minnesota, were married in Columbia City, April twenty-second.

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DR. W. L. PUGH, of Bellefontaine, Ohio, has opened his office in Milroy, occupying the office of the late Dr. C. S. Houghland.

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DR. DANIEL SIGLER, of Elwood, oldest active Madison county physician, celebrated his ninety-first birthday anniversary May sixth.

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DR. H. C. KRAFT, of Noblesville, and Mary Amanda Baker, of Noblesville, were married May tenth.

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DR. CHESTER A. STAYTON is acting roentgenologist for the Indianapolis Methodist Hospital. Dr. Stayton succeeds Dr. B. D. Harrington, who has resigned.

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THE Northeastern Indiana Academy of Medicine met at Kendallville, April second. Dr. Richard B. Stout addressed the members, his subject being "Spinal Anesthesia—Volume Control Technique."

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DR. GLENN B. PATRICK, of Elkhart, has opened his office at 431 South Second street, limiting his practice to pediatrics and children's surgery. He was formerly connected with Drs. J. A. Work and D. D. Todd.

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C. C. HESS, of the Indianapolis Methodist Hospital, has been made president-elect of the Indiana State Hospital Association. Mr. Hess, who will serve in 1935, will succeed Mr. E. C. Moeller, of the Fort Wayne Lutheran Hospital.

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THE monthly meeting of the Tri-County Medical Association was held at Muscatatuck Park Inn, April twenty-fifth. Members and their wives were present from Bartholomew, Jackson and Jennings counties. Dr. W. U. Rutledge, of Louisville, Kentucky, gave the principal address.

DR. JOHN G. BENSON, of Indianapolis, was the principal speaker at a health meeting in Crawfordsville, Sunday, April fifteenth. The meeting was sponsored by the four protestant churches of the city, the Culver hospital staff, and the Montgomery County Medical Society.

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THE Evansville St. Mary's Hospital staff held its annual meeting May tenth. Dr. Norman F. Miller, of Ann Arbor, addressed the members. His subject was "Pelvic Inflammatory Disease." Afternoon demonstrations began at one o'clock and the program carried through dinner and the evening.

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THE thirty-fifth annual meeting of the American Proctologic Society will meet in Cleveland, June eleventh and twelfth, with headquarters at the Hotel Cleveland. Complete program and other information may be obtained from the secretary, Dr. Frank G. Runyeon, 1361 Perkiomen Avenue, Reading, Pa.

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THE study club group of the Northeast District Nursing Service Bureau, comprised of private duty nurses from the northeast district of the Indiana State Nurses Association, met May twelfth at St. Joseph's Hospital nurses home, Fort Wayne. Speakers were Dr. E. R. Carlo, Dr. W. R. Wilkins, Dr. L. P. Harshman, Dr. B. S. Cornell, Dr. L. T. Rawles, Miss Mildred Allgire, and Miss Helen Teal.

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THE seventh annual graduate fortnight of the New York Academy of Medicine will be held October twenty-second to November second, and will be devoted to a consideration of gastrointestinal diseases. Complete program and registration blank may be secured by addressing Dr. F. P. Reynolds, The New York Academy of Medicine, 2 East 103rd Street, New York City.

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OFFICERS of the Fort Wayne Medical Society, elected May fifteenth, are L. P. Harshman, president; H. A. Ray, vice-president; W. W. Duemling, secretary; E. L. Cartwright, treasurer. Delegates are S. P. Hoffman (alternate C. R. Dancer); Maurice Lohman (alternate E. R. Carlo); and W. C. Wright (alternate D. W. Schafer). Censors are Allen Hamilton, H. L. Murdock and Charles J. Rothschild.

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THE twentieth annual tournament of the American Medical Golfing Association will be held at the Mayfield Country Club, Cleveland, June eleventh. Thirty-six holes and eighteen hole matches will be played for the fifty prizes offered in eight events. The Association has 1,100 members. All male Fellows of the American Medical Association are eli-



gible to membership. Application blanks may be secured from Bill Burns, 4421 Woodward Avenue, Detroit, Michigan.

DR. M. H. DRAPER, of Fort Wayne, was elected president of the Indiana Tuberculosis Association at the annual meeting held in Indianapolis, April eighteenth. Other officers elected to serve with Dr. Draper are Dr. Paul D. Crimm, Evansville, first vice-president; Dr. W. H. Stemm, North Vernon, second vice-president; Mrs. William Gromelspacher, Logansport, secretary; and Dr. E. M. Amos, Indianapolis, treasurer.

THE annual meeting of the American Association for the study of goiter will be held in Cleveland, June seventh to ninth, inclusive, with headquarters at Wade Park Manor. Scientific sessions are open to any members of the medical profession in good standing. Registration fee will be two dollars. Complete programs for the meeting may be obtained by writing Dr. J. R. Yung, Terre Haute, Indiana, who is corresponding secretary for the Association.

DRS. MAX A. BAHR and Walter L. Bruetsch, of Indianapolis, presented an address and scientific exhibit on "Epidemic Encephalitis and Its Sequelae" at the meeting of the American Psychiatric Association in New York City, the week of May twenty-eighth. Research work in this disease from the Central State Hospital laboratory during the past five years was presented. The leading discus-sant of the paper was Dr. James Ramsay Hunt, professor of neuropsychiatry at Columbia University.

IN HONOR of Dr. Dean Lewis, the Indiana University School of Medicine gave a dinner, May twenty-second, at the Riley Hospital, to which secretaries of county societies and other physicians were invited. The dinner meeting, presided over by Dr. A. M. Mitchell, secretaries' chairman, was held in connection with the annual postgraduate course given by the University from May twenty-first to June second. The following were registered for the dinner meeting:

Allen County: W. W. Duemling, E. M. Van-Buskirk, E. L. VanBuskirk, D. H. Cameron.  
Bartholomew County: A. M. Kirkpatrick.  
Benton County: V. L. Turley.  
Boone County: E. A. Rainey.  
Carroll County: E. H. Brubaker.  
Clay County: J. C. Shattuck.  
Davies-Martin County: E. B. Smoot.  
Dearborn-Ohio County: E. L. Libbert.  
Delaware-Blackford County: A. C. Rettig.  
Fulton County: Mark M. Piper.  
Grant County: E. F. Jones.  
Greene County: M. S. Mount.

Hancock County: J. L. Allen.  
Hendricks County: W. T. Lawson.  
Henry County: George Wiggins.  
Lawrence County: L. H. Allen, H. C. Ragsdale.  
Madison County: M. A. Austin.  
Marion County: J. K. Berman, C. J. Clark, C. G. Culbertson, L. A. Ensminger, W. D. Gatch, V. K. Harvey, Mr. T. A. Hendricks, G. B. Jackson, W. H. Kennedy, H. S. Leonard, J. B. H. Martin, J. S. McBride, R. H. Moser, J. E. Owen, E. E. Padgett, Donald Pond, F. C. Walker, H. H. Wheeler, Matthew Winters.  
Miami County: E. H. Andrews.  
Monroe County: G. O. Peters, H. B. Thomas.  
Montgomery County: G. E. Clements.  
Orange County: George Dillinger.  
Putnam County: Gilbert D. Rhea.  
Shelby County: R. W. Gehres, B. G. Keeney, Samuel Kennedy.  
Tippecanoe County: F. T. Romberger.  
Vigo County: C. N. Combs, A. M. Mitchell.  
Washington County: C. B. Paynter, H. C. Wadsworth.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Cheplin Biological Laboratories, Inc.

Ampule Solution Procaine Hydrochloride 2 per cent, 1 cc.

Ampule Solution Procaine and Epinephrine, 3 cc.

Ampules Bismuth Subsalicylate, 2 grains (0.13 gm.) in oil, 1 cc.

Ampules Solution Mercury Succinimide 1/6 grain (0.01 gm.), 1 cc.

Lederle Laboratories

Refined Diphtheria Toxoid (Alum precipitated)  
Schering & Glatz, Inc.

Urotropin

Urotropin Tablets, 5 grains (0.3 gm.)

Urotropin Tablets, 7½ grains (0.5 gm.)

Ucoline Products Company

Ucoline Calcium Phosphate Cocoa Wafers

## INDIANA UNIVERSITY NEWS NOTES

DR. BURTON D. MYERS of the Indiana university school of medicine spoke on "The Anatomy of the Endocrines" at the third annual graduate meeting of the Indiana State Medical Association at Evansville. Dr. W. D. Gatch, dean of the I. U. Medical School at Indianapolis, discussed the "Value of Postgraduate Study." Other faculty members of Indiana University on the program were Dr. E. E. Padgett, professor of surgery and president of the State Medical Association; Dr. W. J. Moenkhaus, professor of physiology; and Dr. Leon G. Zervas, professor of medicine.

THE Indiana University School of Medicine will join with the Indiana State Medical Association and the Indianapolis Medical Society in entertaining the 1935 convention of the American College of Physicians to be held in Indianapolis.

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AN inspection trip to the Eli Lilly Company's pharmaceutical laboratories in Indianapolis and the company's biological laboratories near Greenfield was made May 2 by 110 senior class members of the Indiana University School of Medicine. The seniors, accompanied by Dr. J. O. Ritchey, Dr. J. W. Carmack, Dr. A. M. Mendenhall and Dr. R. R. Hippensteel, of the medical faculty, spent the entire day in inspecting the workings of the Eli Lilly plants. A group of the Lilly doctors accompanied the I. U. senior medical students on their trip through the laboratories. Everything possible was done to make the trip educational and profitable. The invitation by the Lilly company is extended annually to the I. U. senior medical students.

The latter part of March, 57 members of the I. U. senior class made a two-day inspection trip of the Parke-Davis and company drug manufacturing plant and experimental biological farm at Detroit, Mich.

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STAFF members of the Indiana University medical center of Indianapolis recently attended the biennial national meetings of the American Nurses' Association, the League of Nursing Education, and the American Association of Public Health Nursing. The joint sessions were held in Washington, D. C.

Members of the Indiana University staff who attended included the following: Cordelia Hoeflin, director of the training school for nurses; Mary Heckard, superintendent of nurses, Riley Hospital; Beulah McCoy, head nurse, William H. Coleman Hospital; Wanetta Hubble, assistant superintendent of nurses, Coleman Hospital; Florence Horn, supervisor of operating room, Riley Hospital; Wilma Watt, assistant head nurse, Riley Hospital; Viola Hackerd, head nurse, Riley Hospital; Mrs. Marjorie Loudermilk, head nurse, first floor, Long Hospital; Crystal Halstead, head nurse, third floor, Long Hospital; Mabel Wharton, head nurse, first floor, Coleman Hospital; Delight Stephens, Rotary Convalescent Home; Dr. C. C. Culbertson, director of central laboratory; Mrs. Gertrude Muench, physiotherapist, Long Hospital, and Josephine Doup, head nurse, orthopedic ward, Riley Hospital.

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EARLY diagnosis and treatment of cancer will be among the important problems of preventive medicine on the program of the second annual intensive postgraduate course at the Indiana University School of Medicine May 21 to June 2. The course is being held for active physicians of Indiana and

other states who desire advanced instruction in the latest developments of medical science. Unusual opportunities for bedside clinical study in the three hospitals of the I. U. medical center will be provided.

More than 200 doctors are expected to enroll with representatives from many different states. Two members of the staff of Johns Hopkins University School of Medicine, Dr. Dean Lewis and Dr. J. C. Bloodgood, and Dr. U. J. Wile of the University of Michigan Medical School will be included among the instructors.

Secretaries of county medical societies of the state and officials of the Indiana State Medical Association will attend a symposium Tuesday afternoon and evening, May 22, on modern health problems relating to the profession of medicine as a whole. Dr. Lewis, a past president of the American Medical Association, will address these groups.

Alumni homecoming day for the I. U. School of Medicine will be held. Addresses will be given by Dr. Byrl Kirklin, who graduated in 1914 and is now head of the department of roentgenology of the Mayo clinic, and by Dr. William Green, who graduated in 1925 and is now a member of the orthopedic department of the Harvard Medical School and attending surgeon at the Children's Hospital in Boston.

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"THE annual postgraduate course has brought inquiries from physicians from Virginia to Texas," said a university official in announcing the course. "It is unique in character in that it gives the benefit both of detailed instruction in the latest developments of medical science and an opportunity for clinical study that scarcely can be surpassed."

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THOMAS GORE of Evansville has been elected president of the Theta Kappa Psi professional medical fraternity at Indiana University. Others elected are: Linville Baker, Cambridge City, vice-president; Melvin Cox, Indianapolis, secretary; William Conner, Brownstown, and Boyd Mahuron, Salem, historians.

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THE following fourteen students of the Indiana University School of Medicine recently were initiated into the Nu Sigma Nu professional medical fraternity: R. C. Miller, North Vernon; C. C. Voorhis, Indianapolis; J. L. Sims, Indianapolis; J. H. Stewart, Marion; R. H. Williams, Anderson; M. H. Coffel, Monon; S. C. Michaelis, Fort Wayne; J. M. Moss, Terre Haute; M. P. Cuthbert, Kokomo; R. S. Bloomer, Rockville; W. S. Tucker, Salem; D. J. Casely, Greencastle; F. M. Scott, Shelbyville; F. T. Romberger, Lafayette. Initiation services were held at the Travertine room of the Lincoln Hotel, Indianapolis.



BOOK REVIEWS

BOOKS RECEIVED

**CORRECTIVE PHYSICAL EDUCATION.** By Josephine Langworthy Rathbone, M.A., instructor in Physical Education, Teacher's College, Columbia University. 292 pages with 153 illustrations. Cloth. Price \$2.50. W. B. Saunders Company, Philadelphia and London, 1934.

\* \* \*

**DISEASES OF THE SKIN.** For use of students and practitioners. By Oliver S. Ormsby, M.D., Clinical Professor and Chairman of the Department of Dermatology, Rush Medical College; revision of the histopathology by Clark Wylie Finerud, B.S., M.D., assistant clinical professor of Dermatology, Rush Medical College. Fourth edition, enlarged and thoroughly revised. 1,288 pages with 619 engravings and 3 colored plates. Cloth. Price \$11.50. Lea and Febiger, Philadelphia, 1934.

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**MODERN DRUG ENCYCLOPEDIA AND THERAPEUTIC GUIDE.** Presentation of 8160 modern, non-pharmacopoeal, medicinal preparations. By Jacob Gutman, M.D., Phar. D., F. A. C. P., consulting physician, Manhattan General Hospital, New York. 1,393 pages. Cloth. Price \$7.50. Paul B. Hoeber, Inc., New York, 1934.

\* \* \*

**I KNOW JUST THE THING FOR THAT.** For patients with doctors and doctors without patience. By Dr. J. F. Montague. 265 pages. Cloth. Price \$2.00. The John Day Company, New York, 1934.

\* \* \*

**SURGICAL CLINICS OF NORTH AMERICA.** New York Number—April, 1934. Volume 14, Number 2. Issued serially, one number every other month. 293 pages, with 71 illustrations. Per clinic year (February, 1934, to December, 1934), paper \$12.00, cloth \$16.00. W. B. Saunders Company, Philadelphia and London, 1934.

\* \* \*

**THE SINGLE WOMAN.** A medical study in sex education by Robert Latou Dickinson and Lura Beam. 469 pages. Cloth. Price \$5.00. The Williams and Wilkins Company, Baltimore, Maryland, 1934.

SOCIETIES AND INSTITUTIONS

**CARROLL COUNTY MEDICAL SOCIETY** met at Camden. May eleventh, to hear Dr. Frank Gastineau, of Indianapolis, discuss "Common Skin Diseases in Adult Life." Attendance numbered fourteen.

\* \* \*

**CASS COUNTY MEDICAL SOCIETY** members met at Logansport, April twentieth, to hear Dr. W. F. Hughes, of Indianapolis, talk about "Common Diseases of the Eye." Twenty-five physicians attended.

\* \* \*

**CLINTON COUNTY MEDICAL SOCIETY** met May third at the Coulter Hotel, Frankfort. Dr. George S. Bond, Indianapolis, was the guest of the evening, and presented a paper on "Bright's Disease." The society voted to carry the motion offered to have a permanent secretary for the Ninth District Medical Society. The president appointed Drs. C. B. Compton, J. S. Ketcham, and H. R. Royster as a committee to arrange for ladies' night, June seventh.

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**DEARBORN-OHIO COUNTY MEDICAL SOCIETY** held its regular monthly meeting, April twenty-seventh, at Lawrenceburg. Dr. Edward Northeutt, of Covington, Kentucky, addressed the attendants, his subject being "Fractures." Sixteen members were present.

**DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY** held a dinner meeting at the Roberts Hotel, Muncie, May fifteenth, the last meeting before the summer intermission. Matters discussed the annual picnic of the Society to be held in June. Dr. Paul C. Vietzle was elected to membership.

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**ELKHART COUNTY MEDICAL SOCIETY** members met May tenth, at the Hotel Alderman, Goshen, with Dr. Matthew Winters, Indianapolis, as the principal speaker. Dr. Winters' subject was "Summer Diarrhea and Gastro-Intestinal Upsets." Attendance numbered twenty-five. This was the last scientific meeting of the Society until September.

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**FAYETTE-FRANKLIN COUNTY MEDICAL SOCIETY** met at Brookville, May tenth, with Dr. Goethe Link, Indianapolis, as the principal speaker, talking on "Hyperthyroidism." Attendance numbered eighteen.

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**FORT WAYNE MEDICAL SOCIETY** met at the Fort Wayne State School, May first, to hear addresses by Drs. J. S. Skobba and L. P. Harshman. The May eighth meeting was held at the Irene Byron Hospital.

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**FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY** met at the Ward Hospital, Williamsport, May third. Dr. Floyd T. Romberger, of Lafayette, presented a paper on "Selective Anesthesia," pointing out the necessity of selecting an anesthetic to suit the condition of the patient.

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**GIBSON COUNTY MEDICAL SOCIETY** met at Wheeler's Cafeteria in Princeton, May fourteenth, to hear Dr. R. H. Crawford, of the Eli Lilly Company, discuss "Pernicious Anemia and Its Treatment." Discussion of the paper was led by Dr. J. R. Montgomery, Owensville.

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**GRANT COUNTY MEDICAL SOCIETY** met for its regular monthly meeting at Marion in the Hotel Spencer, April twenty-fourth. Drs. Caylor and Nickel, of Bluffton, were principal speakers.

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**HENDRICKS COUNTY MEDICAL SOCIETY** met at Danville, April twenty-seventh. Dr. G. B. Jackson, Indianapolis, presented a paper on "Toxemia in Pregnancy." By a vote of the Society, the time of meeting was changed to the old date, the fourth Friday of each month.

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**HENRY COUNTY MEDICAL SOCIETY** members met at the Henry County Hospital, May seventeenth. Dr. J. R. Brayton, Indianapolis, talked on "Syphilis and Its Treatment."

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**HOWARD COUNTY MEDICAL SOCIETY** members met at Kokomo, May fourth. Judge George B. Shenk spoke on "Medical Jurisprudence."

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**INDIANAPOLIS MEDICAL SOCIETY** held its May first meeting at the Athenaeum, with Drs. C. P. Emerson and Harold M. Trusler providing the program; on May eighth Dr. George E. Brown, of the Mayo Clinic, discussed "Recent Developments in the Field of Essential Hypertension," and in the afternoon at the City Hospital Dr. Brown conducted a clinic on "Peripheral Vascular Diseases." At the May fifteenth meeting held in the auditorium of the nurses' home at St. Vincent's Hospital speakers were Drs. M. Joseph Barry, K. R. Ruddell, Norman Loomis and Ralph L. Lochry.

\* \* \*

**JAY COUNTY MEDICAL SOCIETY** members met at the Portland Country Club, May fourth, to hear Dr. Goethe Link, Indianapolis, discuss "Mild Chronic Thyroid Disease, Symptomatology, Diagnosis and Treatment." Attendance numbered fifteen.

JEFFERSON COUNTY MEDICAL SOCIETY members met at the Hillside Hotel, Madison, April twenty-fourth, for a dinner meeting. Dr. L. A. Smith, Indianapolis, was the guest speaker, his subject being "Childhood Tuberculosis." Dr. Smith's paper was illustrated with lantern slides and x-ray films. Attendance numbered thirty.

\* \* \*

KNOX COUNTY MEDICAL SOCIETY held a meeting at the nurses home in Vincennes, May eighth. Dr. Stewart presented a paper on "Insulin in Malnutrition." Twelve members were present.

\* \* \*

LAKE COUNTY MEDICAL SOCIETY members met in regular session at the Mercy Hospital, Gary, May tenth. Drs. Rosenthal and Strauss, of the Michael Reese Hospital Tumor Clinic, were principal speakers. Subjects presented were "The Present Day Treatment of Cancer" and "The Surgery of Cancer."

\* \* \*

LA PORTE COUNTY MEDICAL SOCIETY met at the Rumely Hotel, LaPorte, May seventeenth. Dr. William Cubbins, Chicago, discussed "Injuries Around the Knee Joint."

\* \* \*

MONTGOMERY COUNTY MEDICAL SOCIETY members heard Dr. R. N. Harger, state toxicologist, present a paper on "Are We A Million Guinea Pigs?" at their regular monthly meeting, April nineteenth. The meeting was held at Culver hospital.

\* \* \*

MUNCIE ACADEMY OF MEDICINE met at the Hotel Roberts, May eighth, with Dr. Robert M. Moore, Indianapolis, as speaker. Dr. Moore's subject was "Factors Concerning Prognosis in Heart Disease."

\* \* \*

PORTER COUNTY MEDICAL SOCIETY members met at the Hotel Lemcke, Valparaiso, April twenty-fourth. Dr. Herbert Landis, of Mercy Hospital, Chicago, presented a discussion of genito-urinary diseases. Fifteen members were present. Plans were made for the Tenth District meeting at Valparaiso, May twenty-ninth.

\* \* \*

POSEY COUNTY MEDICAL SOCIETY met at the Tavern Inn, New Harmony, April twelfth. Dr. Thomas Rietz discussed "Coronary Occlusion" before the ten members present. At the May tenth meeting, Dr. Paul D. Crimm, of Boehne Hospital, Evansville, was the principal speaker.

\* \* \*

RANDOLPH COUNTY MEDICAL SOCIETY met at Winchester, May fourteenth. "Office Treatment of Ano-Rectal Disease" was the subject presented by Dr. A. B. Graham, Indianapolis. Thirteen members and two guests were present.

\* \* \*

RIPLEY COUNTY MEDICAL SOCIETY members met at the office of Dr. George Row, Osgood, May ninth. A paper entitled "Extra-Uterine Pregnancy" was read by Dr. Row.

\* \* \*

SHELBY COUNTY MEDICAL SOCIETY members and their families and guests enjoyed a banquet, May second, at the Strand Aleazar, Shelbyville. Dr. C. A. Tindall, president of the society, was master of ceremonies. Dr. Samuel Kennedy presented a very interesting paper on the Shelby County Medical Society, naming the pioneer physicians of the county and tracing the organization of the medical society in the county. Other speakers were Mrs. R. W. Gehres, Dr. Jewett Hord, Will A. Yarling, and Dr. L. T. Freeland. Sixty-two members and guests enjoyed the affair.

\* \* \*

ST. JOSEPH COUNTY MEDICAL SOCIETY met April twenty-fourth in the Public Library, South Bend, with twenty-five members and five guests present. Dr. H. L. Cooper reported a case of duodenal ulcer. The principal talk was presented by Dr. L. F. Fisher, whose subject was "Duodenal Ulcer." The paper was discussed by Drs. Faltin, Cooper, Birmingham and Fisher.

On May first, the society met in the medical room of the Public Library, with forty members and six guests present. Dr. Green, chairman of the Radio Committee, moved that the radio broadcasting be continued in the same manner as it had

been done previously. The motion was unanimously carried. The paper of the evening, "Figuring Diabetic Diets," was presented by Dr. J. E. McMeel, and was illustrated with lantern slides. The paper was discussed by Drs. Faltin, Senenich, Hoffman, Selby, Knode, Thompson, Giordano, M. Lyon and McMeel.

A joint meeting of the Notre Dame Academy of Science and the St. Joseph County Medical Society was held in Washington Hall, Notre Dame, May tenth. Of the three hundred present, thirty-four were members of the society. Dr. Gilbert Fitz-Patrick, of Chicago, was the principal speaker, and his subject was "The Cancer Problem." His talk was illustrated with lantern slides and the famous Canti moving picture.

The May fifteenth meeting of the society was held in the Public Library, South Bend, with thirty members and two guests present. Dr. Charles C. Terry presented a paper on "The Injection Treatment of Varicose Veins." The paper was discussed by Drs. Green, Sandock, Moreland, Grillo, L. Sandoz, and Biekel.

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TIPPECANOE COUNTY MEDICAL SOCIETY met at Lincoln Lodge, Lafayette, May tenth, to hear Dr. M. L. Axlerod, Cleveland, Ohio, talk on "Later Developments in Anesthesia." Forty-five physicians attended.

\* \* \*

VIGO COUNTY MEDICAL SOCIETY met at Terre Haute, May eighth, to hear Albert J. Stump discuss "Medical Legislation." Attendance numbered fifty-five.

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WAYNE-UNION COUNTY MEDICAL SOCIETY members met in the ballroom of the Richmond-Leland Hotel, May third, to hear Dr. Clifford Strachley, Cincinnati, discuss "Angina Pectoris."

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WHITLEY COUNTY MEDICAL SOCIETY members met at Columbia City, May eighth, to hear Dr. Ralph Elston, Fort Wayne, discuss "Fractures and Their Treatment." This was a dinner meeting.

#### FIRST DISTRICT MEDICAL SOCIETY

The First District Medical Society held its annual meeting at Evansville, April twenty-sixth, in conjunction with the third annual graduate educational meeting of the Indiana State Medical Association.

Dr. William E. Jenkinson, Mount Vernon, was elected president to succeed Dr. I. C. Barelay, Evansville, who was named counselor. Dr. Minor Miller, Evansville, was made vice-president to succeed Dr. C. A. Miller, Princeton. Dr. Keith T. Meyer, Evansville, was re-elected secretary-treasurer.

#### THIRD DISTRICT MEDICAL SOCIETY

The Third District Medical Society held its spring meeting at Bedford, May second, in the Greystone Hotel, with an attendance of forty-four.

The meeting opened at 2:30 in the afternoon with a paper by Dr. A. E. Newland, of Bedford, on "Intestinal Obstruction." Other papers were presented by Dr. George Dillinger, French Lick, who reported "Ear Infections in Children," and Dr. Herman Morgan, health commissioner of Indianapolis, whose subject was "Child Health and Child Welfare in Connection with Public Health."

A feature of the meeting was a banquet in honor of the past presidents of the Third District, four of whom were present, and were introduced to the assemblage along with Dr. Padgett, president of the Indiana State Medical Association, Dr. W. J. Leach, president-elect, and Mr. Thomas A. Hendricks, executive secretary of the State Association.

The evening session was addressed by Dr. A. M. Mendenhall, of Indianapolis, whose subject was "Some Newer Things in Obstetrics."

A business session resulted in the re-election of Dr. H. C. Ragsdale, Bedford, as counselor for the District. Jeffersonville was selected as the place for the fall meeting which will be held in November.

L. H. ALLEN, M. D., Secretary.



**FIFTH DISTRICT MEDICAL SOCIETY**

The Fifth District Medical Society, the Vigo County Medical Society and the Aesculapian Society of the Wabash Valley were guests of the Terre Haute Academy of Medicine at the Hotel Deming, Terre Haute, May fourth. Welcome addresses were presented by Drs. A. F. Knoefel, E. E. Padgett, W. D. Ashury, W. D. Gerrish, O. O. Alexander, and O. H. Crist.

The principal scientific paper was given by Dr. Robert B. Osgood, of Boston, whose subject was "The General Aspects of Arthritis and Its Treatment."

**INDIANA STATE DIVISION OF PUBLIC HEALTH**

**BUREAU OF COMMUNICABLE DISEASES**

Monthly Report, April, 1934

Diseases	April 1934	March 1934	February 1934	April 1933	April 1932
Tuberculosis	84	124	111	154	246
Chickenpox	395	374	475	304	378
Measles	3953	3803	2191	817	414
Scarlet Fever	721	1599	1049	944	719
Smallpox	2	7	7	13	48
Typhoid Fever	28	14	10	8	6
Whooping Cough	413	209	244	122	545
Diphtheria	68	83	130	80	131
Influenza	73	202	303	146	548
Pneumonia	31	49	57	44	65
Mumps	50	79	96	171	694
Poliomyelitis	1	1	1	3	3
Meningitis	6	8	7	16	43

THURMAN B. RICE, M. D.

**INDIANA STATE MEDICAL ASSOCIATION**

**BUREAU OF PUBLICITY**

March 8, 1934.

Meeting called to order at 3.30 p. m.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D., J. H. Stygall, M. D., and T. A. Hendricks, executive secretary.

Release for publication in Saturday papers, March 17, "What About Our Drugs?," approved by the Bureau.

Release for publication in Saturday papers, March 24, "Results of Diphtheria Prevention Campaign," approved.

Radio releases:

Saturday, February 24—"Sinus Trouble."

Saturday, March 3—"Hoosier Basketball."

Report on medical meeting:

Feb. 21—Parke-Vermillion County Medical Society, Clinton, Ind. "Fraetures and Dislocation."

Request for speaker:

March 22—Exchange Club, Muncie, Ind. "The Medical Profession as Seen from the Standpoint of the Layman."

Complaint received by the Bureau of Publicity that a doctor in Indianapolis is having his name announced over the radio in connection with tuberculosis society broadcasts. The executive secretary was instructed by the Bureau to send a letter to the secretary of the Indianapolis Medical Society stating that the Indiana State Medical Association through its official body, the House of Delegates, had gone on record advocating the following rule of the Bureau of Publicity:

The Bureau has adopted a rule that no physician who is in private practice should have his name mentioned over the radio in connection with the Bureau of Publicity broadcasts. The names of physicians holding public office and connected with public institutions may be mentioned over the radio.

An historie outline of the make-up of the Bureau of Publicity since its formation in 1922 was presented to the Bureau. Copies of this outline are to be prepared and given to each member of the Bureau.

The Parent-Teacher Bulletin containing the medical page was brought to the attention of the Bureau. Copy for this page is supplied by the Bureau of Publicity.

March 24, 1934.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D., J. H. Stygall, M. D., and T. A. Hendricks, executive secretary.

Release for publication in Monday papers, April 2, "May Day Preparations," read and approved by the Bureau.

Radio releases:

Saturday, March 10—"Measles."

Saturday, March 17—"Spring Tonics and Spring Fever."

Saturday, March 24—"Results of Diphtheria Prevention Campaign."

Report on medical meeting:

March 22—Exchange Club, Muncie, Ind. "Medicine from the Viewpoint of the Layman."

Request for speaker:

April 4—Shelby County Medical Society, Shelbyville, Ind. Speaker on "Internal Medicine" requested.

Correspondence with a county society concerning newspaper publicity brought to the attention of the Bureau. Official communication approved to be sent to this county society.

Bulletin prepared by the Indiana Division of Public Health upon May Day brought to the attention of the Bureau.

One member of the Bureau was assigned to look over the list of United States Public Health Service publications and recommend at the next meeting of the Bureau those which should be obtained by the Bureau.

Letter received from a physician asking for material that would be helpful in preparing health talks. The Bureau has a great deal of this material on file, but the very best way of getting up-to-date information upon any subject that a physician may specify is by addressing W. W. Bauer, M. D., director of the Bureau of Health and Public Instruction of the American Medical Association, who has on file material upon more than four hundred public health topics, collected from Hygeia and other reputable sources.

Letter received from the secretary of the Minnesota State Medical Society asking for suggestions of the Bureau of Publicity in regard to the institution of a speakers' bureau in that state. A report upon the work of the Bureau of Publicity along this line and several official annual reports of the Bureau sent to Minnesota.

The Bureau approved the idea of having printed letterheads for Bureau of Publicity releases similar to the heading now used for the secretaries' bulletins.

Better Business Bureau Bulletin of March 24 giving complete report upon C. Roland Perdue, M. D., 411 State Life Building, Indianapolis, Indiana, and the micro-dynameter, an instrument which he uses that "makes a complete analysis of your health before your very eyes," brought to the attention of the Bureau. The Bureau instructed the secretary to forward this bulletin to the editor of THE JOURNAL with the suggestion that an article warning the profession in regard to Perdue be prepared for THE JOURNAL.

In the Indianapolis Times, Perry Thomas, representing the Crazy Water Crystals Company, is reported to have said at a meeting that was held for discussion of the Copeland-Tugwell bill that "all that is wrong with the patent medicine business is that we are selling too much and the doctors don't like it. We never have contended that patent medicine heals disease; it merely paves the way for the body to do its own healing." A letter in answer to this statement was approved by the Bureau, to be sent to the editor of the Indianapolis Times.

Each member of the Bureau was supplied with a short outline of the history of the Bureau.

The secretary was instructed to prepare a statement that is to be carried in THE JOURNAL and sent to the secretary of

each county medical society, asking each county society secretary to send a list of local physicians, and their subjects, who might be available to speak before county medical societies and luncheon clubs. The Bureau plans on compiling such a list and sending it to the secretary of each county medical society.

April 6, 1934.

Meeting called to order at 3:30 p. m.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D.; J. H. Stygall, M. D., and T. A. Hendricks, executive secretary.

Release for publication in Saturday papers, April 14, "Annual State Graduate Educational Meeting at Evansville," read and approved by the bureau.

Radio release, Saturday, March 31—"Spring Cleaning."

Reports on medical meetings:

March 14—School No. 85, Indianapolis, Parent-Teacher Association. "Foundations of Good Habits in Children: Steps Toward the Goal of Self-Reliance."

April 5—Fountain-Warren County Medical Society, Kingman, Ind. "Medical Economics."

Requests for speakers:

April 4—Shelby County Medical Society, Shelbyville, Ind. "Internal Medicine." Speaker obtained.

April 10—Rush County Medical Society, Rushville, Ind. "Amebic Dysentery." Speaker obtained.

Further correspondence in regard to the ruling of the bureau concerning the propriety of a county society authorizing the use of an individual physician's name over the radio and in the newspapers reviewed by the bureau. (The rulings of the bureau concerning the use of physicians' names over the radio and in connection with extended articles concerning treatment in the newspapers has been approved by the House of Delegates of the Indiana State Medical Association on several occasions.)

The copy of the *Indiana Parent-Teacher* for April containing the article "Cleanliness Promotes Health" approved by the Bureau of Publicity.

There being no further business the meeting was adjourned.

April 16, 1934.

Meeting called to order at 3:30 p. m.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D.; J. H. Stygall, M. D., and T. A. Hendricks, executive secretary.

Release for publication in Saturday papers, April 28, "Spring Cleaning," read and approved by the bureau.

Radio releases: Saturday, April 7—"Spring Exercise." Saturday, April 14—"Home Safety."

Report on medical meeting:

April 10—Rush County Medical Society, Rushville, Ind. "Amebic Dysentery."

Correspondence in regard to social service courses given by the Extension Division of Indiana University brought to the attention of the bureau.

The bureau authorized the historian to have copies made of pictures of the past presidents in those cases where families desire the originals to be returned. The bureau feels that the City Hospital or the university may be glad to make these copies as an expression of interest in the history of the Indiana State Medical Association.

Request made of the bureau that time be obtained from the Indianapolis radio stations to give five-minute health talks upon Child Health during the week following April 28. The secretary was instructed to attempt to arrange this time with the two local stations with the understanding that the rules of the Bureau of Publicity in regard to broadcasting be adhered to.

The secretary was instructed to prepare a form letter which is to go to the physicians who are to make talks before lay audiences. This letter is to state that such a talk should be informative and should be delivered in simple, understandable language upon a topic which will be of general interest to a lay audience. There should be no personal puffery in these talks.

The Bureau of Publicity approved the general idea that moving pictures might be made at each state meeting. The bureau feels that such pictures would be of tremendous historic value as the years go by.

There being no further business the meeting was adjourned.

## Announcing the KENNEDY-STAYTON CLINIC

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VOLUME 27

JULY, 1934

NUMBER 7

## ORIGINAL ARTICLES

### THE VALUE OF PERIMETRY IN OCULAR DIAGNOSIS AND PROGNOSIS\*

E. W. DYAR, M. D.  
INDIANAPOLIS

In this article, the thought that I wish to bring before you is not original, but rather is to emphasize a most valuable procedure, which by careful usage and intelligent interpretation can become a very convenient adjunct to those having especial interest in ocular diseases.

The following report was obtained from the records taken in the ordinary routine of private practice over a period of about fourteen months, and serves to show in a small way its value to the average oculist, and of how much help it can be in the regular care of his cases. Also it disproves the notion that perimetry is of scientific interest alone.

The instruments for this work are quite numerous as to type and modifications. Broadly, this topic can be summed up in the statement that applies to almost any instrument, and that is: use the one that best fits the operator's individual requirements. The equipment need not be so expensive as to make that in itself prohibitive, because while the refined instruments yield in a measure more exact results, nevertheless, any of the perimeters with a working radius of 33 cm. will take care of work in a satisfactory manner. This should be supplemented with test objects of various sizes in white, red, blue, and green. It is also advantageous to have some form of screen or campimeter for careful study of the central area and blind spot.

The delicacy of the test depends upon two factors: the size of the test object and the colors. By this we determine the exactness of the procedure. In quantitative perimetry the subjects' visual acuity is considered with regard to the size stimulus used. It is best to find the minimal stimulus which can be distinguished with certainty for the peripheral field. As a rule, the one degree target will be found best for people having 20/30 vision

or better. For examination of the area within 30 degrees of fixation, the one-half degree target or even less will yield more accurate results and will enable the operator to map out scotomatous areas which may not appear so readily with the larger stimuli. By qualitative perimetry, we understand the use of the various colored stimuli. Certain of the ocular diseases have been found to give signs of pathology to colors, even though the reaction to white targets may be within the normal limits. Noteworthy are the early contraction of red and green in optic atrophy, contraction for blue in choroidal disease, central loss of red in tobacco amblyopia, Bjerrum sign for blue in chronic simple glaucoma, and inversion and interlacing of colors in hysteria.

Perimetry is not a procedure which is applicable to one type of disease alone, but has some bearing on a goodly number of the eye conditions. The precision in the test depends upon the care taken and the proper use of size of stimuli and the right colors. Lesions which have not become manifest to the objective examination often show very definitely on the field. Cooperation is the only prerequisite for successful results. A great amount of intelligence from the patient is not necessary; however, the examiner must oftentimes be quite tolerant and understanding in order that a reliable record be obtained.

During the period mentioned before, eighty-one cases were examined. Some were negative and were taken while attempting to make a diagnosis by elimination. The majority, however, gave characteristic evidence of some condition which affected the visual pathway. The various conditions have been grouped under fourteen headings and are as follows:

Toxic amblyopia .....	10
Malingering .....	4
Glaucoma .....	22
Optic atrophy .....	6
Sinus disease .....	3
Detached retina .....	1
Hysteria .....	7
Pituitary tumor .....	5
Normal .....	11
Focal infection .....	6
Ophthalmic migraine .....	2
Choroiditis .....	2
Cerebral hemorrhage .....	1
Papilledema .....	1

\* Presented before the Section on Ophthalmology and Otolaryngology at the annual session of the Indiana State Medical Association, French Lick, September, 1933.

Scotomata are of two kinds: that in which the patient is aware of a defect in the field, and known as a positive scotoma, and those defects of which there is no consciousness of a defect, known as negative scotoma. The former are due to some lesion in that portion of the visual tract known as the first neuron, extending from the rods and cones to the ganglionic cell layer. Any lesion back of this produces a defect of which there is no subjective evidence, unless carefully examined. Inflammatory lesions of the choroid coat as a rule affect the neighboring pigment layer and the layer of rods and cones. Such an injury involves the first neuron only. The case of I. H. brings this out in that the chief complaint was an area of blindness below fixation. The field shows the nature of the defect. A mydriatic was instilled and a fairly large area of recent choroiditis was seen above the macula.

Glaucoma is a disease which primarily affects the second neuron, and as a result the defects are negative in character. It is in this disease that perimetry finds its greatest usefulness, especially in the chronic simple type. Acute inflammatory or acute secondary glaucoma have sufficient external evidence along with elevated tension that they do not necessarily need any other signs to clarify the situation. However, in order to make an early diagnosis of chronic simple or chronic inflammatory glaucoma during a period of quiescence, we are more often than not at a loss to state definitely whether it is such by symptoms and objective examination alone. The symptoms may be so gradual that the patient does not notice the contraction in the scope while the macular vision remains normal, and the objective examination reveals nothing characteristic. If we must wait for a steamy cornea, shallow anterior chamber, cupped disc, and increased tension to diagnose the case, the best time is already past to give the patient the benefit of early curative therapy, instead of palliative measures when there is but little vision to save.

Loss of the nasal field is one of the first signs we encounter. If it is not elicited by the larger test objects, then the smaller ones or colors will make the test more sensitive. This is illustrated by the following case:

Mr. R. C. was seen during an attack of chronic inflammatory glaucoma in the left eye. Tension was 45 (Schiotz). The field in this eye showed an irregularly contracted field and a central scotoma. The tension of the right eye was 25. A field was taken as a matter of routine. While the form field was almost normal, the blue showed a cut in the upper portion, dipping towards a vertically elongated blind spot. Objectively and symptomatically the eye was normal.

Later in the process of the disease, various sector-like defects appear. This is the characteristic phenomenon of the disease and is due to the degeneration of certain bundles in the nerve fiber layer of the retina. The explanation of this is the

subject of some controversy and need not be discussed here. The next case brings this point to our attention:

Mr. I. M. Chronic inflammatory glaucoma, left eye. Complaint of attacks of severe pain in the eye and left temple. The field showed a marked contraction, more pronounced nasally. The other fields showed progressive loss until the patient was finally convinced of the need for operation.

The Bjerrum scotoma is the most definite sign of all when it can be elicited and illustrates well an inactive bundle of nerve fibers extending from the blind spot to the periphery. Some authorities regard the presence of this sign to be sufficient evidence for operative intervention. The various ways in which this form of scotoma may manifest itself is shown in the next two cases:

Mrs. J. S. came for refraction. No complaints. Tension suspiciously elevated and when taken with the tonometer showed 47 (Schiotz). Vision 20/20. Second field shows more pronounced loss with small island remaining above. The tension was lowered after an Elliot trephining was done.

In a consideration of the effects of accessory sinus disease upon the eye and the visual field changes resulting, it is necessary to have in mind a few outstanding anatomical points: notably, the relation of the sphenoid sinus to the optic nerve and chiasm; posterior ethmoid cells reaching back to the optic foramen and even an occasional frontal sinus reaching back as far as the apex of the orbit. It is also well to keep in mind that the dural sheath of the optic nerve and brain is continuous with the periosteum which lines the optic foramen, thus making it possible for toxic materials to pass directly into the subdural spaces. Another source of infected material is that through the central artery and vein which serves as a source directly to affect the papillo-macular bundle. One of the first perimetric signs in sinus diseases is enlargement of the blind spot. This is best explained as being due to a peri-neuritis affecting the peripheral nerve bundles which end close about the disc. The distinctness of this enlargement depends upon the length of time and the severity of the process. The next sign to appear is some form of central scotoma due usually to toxic absorption from the central vessels affecting the papillo-macular bundle. Finally, if the inflammation of the sinuses is allowed to continue, the pressure phenomenon, extension of inflammation and bone necrosis lead to a severe optic neuritis.

This is well illustrated in the case of L. H. who was seen with a severe papillitis of the left eye. The field shows a well marked double ring scotoma with a definitely enlarged blind spot. In the attempt to find the exact cause, she was sent to a rhinologist for examination. The report of the sinuses was that of signs of marked inflammation and suspicious bone involvement. An operation was done within a very short time with marked relief of symptoms and improvement of the papil-



litis. During the course of the investigation the Wassermann was drawn and returned four plus. However, after the marked improvement following the clearing of the sinus condition and in view of the fact that she had not received much anti-syphilitic treatment, the opinion was held that the

the papillo-macular bundle which runs in the central portion of the optic nerve is the most highly developed division of the entire tract. This is quite applicable to the works of Edinger who states, "that a high degree of functional activity involves an increased morbidity." From this we reason that the more highly developed nerve fibers will be the first to become involved by the absorption of toxic materials, especially when it is in intimate contact with the central retinal vessels. The case of R. W. brings this to our attention. The patient had noticed failing vision in the right eye for about two months, and in the past two weeks, some involvement of the left. The vision in the right eye was limited to light perception and in the left was a typical caeco-central scotoma. Upon further questioning, it was found that the man was in the habit of consuming at least 50-60 cigarettes a day and worked in a cigar store. This made an almost certain diagnosis of tobacco amblyopia.

sinuses were the direct causative agent and that the lues was of consideration only in making the process more severe and aiding to prolong it.

The next case is that of M. H. who complained of poor vision in the right eye and some dimness in the left. The only positive objective finding was an area of retinal edema above the macula in the right eye; central vision was limited to objects and there was no distinct vision in either eye. The field of the right eye showed almost complete loss except above the macula. It was in the fellow eye that the central relative caeco-central scotoma and enlarged blind spot made the situation definite enough to ask for rhinologic examination. The report on the condition of the nose and accessory sinuses was as follows: Septum deflected to the right high up. Middle turbinate pressing against deflection. X-ray showing of hyperplastic tissue in the right antrum and cloudiness of anterior and posterior ethmoid cells. Sphenoid cloudy. Local treatment was instituted and two days later the second field showed some improvement. Operative intervention was advised and done the following day. This consisted of sub-mucous resection of the septum, removal of the anterior two-thirds of the right middle turbinate, exenteration of anterior and posterior ethmoid cells and enlarging the natural ostium into the right sphenoid cavity. The last field showed the marked improvement which resulted.

The chronic form of retro-bulbar neuritis, which we term toxic amblyopia, is also characterized by certain perimetric signs which are quite typical. To understand the process, we must realize that

Not only is perimetry limited to ocular disturbances alone, but gives information of pathology in the entire visual tract. Chiasmal disease shows evidences that cannot be mistaken. The most common are the various disturbances of the pituitary body giving a bitemporal hemianopsia. The case of M. H. was an example of this condition. The complaint was dimness of vision especially of the left eye. The fields show a definite bitemporal cut involving the macula in the left eye and barely escaping it in the right. There were no other symptoms; physical examination and laboratory

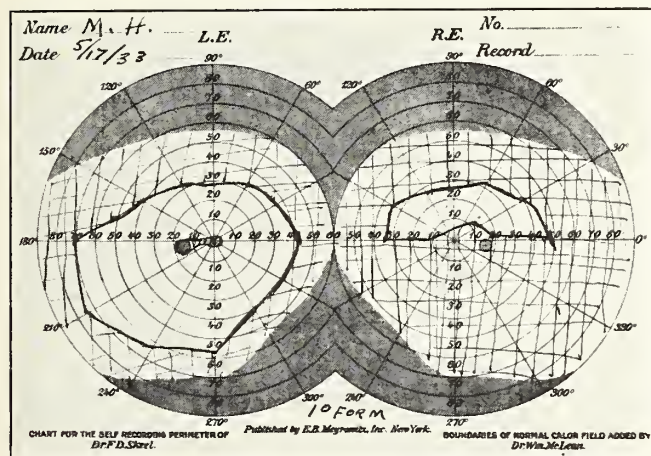


Plate 1

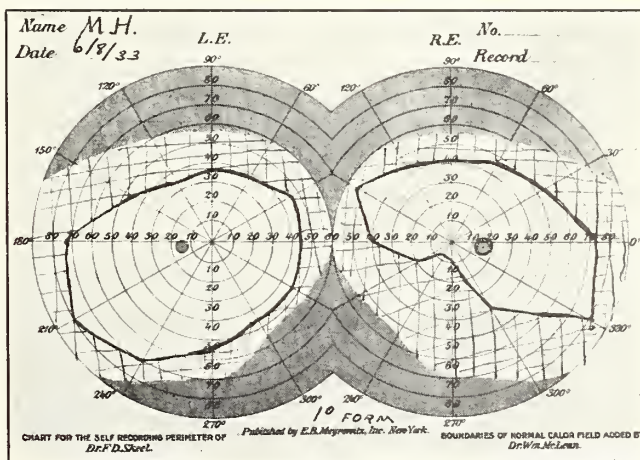


Plate 2

findings were negative, with the exception of the x-ray of the skull which showed definite enlargement of the sella turcica and destruction of the posterior clinoid processes. The patient was given large doses of deep x-ray therapy without improvement as is shown in the second plate. Surgery was finally resorted to and upon exposing the sella, the

cause of the pressure was found to be due to an aneurysm of an anomalous branch of the right ophthalmic artery which passed directly over the sella and involved the pituitary body. This was ligated and the wound closed. The last field shows some improvement, especially in the left eye. Another case was that of Mrs. C. This showed another bi-temporal cut, although not as pronounced as the first. So far she has refused any form of therapy and has suffered no impairment in health.

Lesions of the internal capsule frequently give signs in the field due to the close proximity to the first portion of the optic radiation. The case of S. B. showed a definite left homonymous hemianopsia due to a small cerebral hemorrhage which occurred about three weeks before.

Perimetry has a definite scope of usefulness in the functional group of cases as well as those of organic origin. The oculist always numbers among his most difficult cases those in which no organic pathology can be found but that the complaint of poor vision is paramount. The visual field can be the final court of appeal by which the question of functional disturbance can be proved or disproved. Broadly, hysteria is a condition in which some form of inhibition is the dominant manifestation. The retina, because of its extreme sensitivity, can well be the sensory end organ in which the phenomenon can become manifest. The most common sign of hysteria in the visual field is that of contraction, concentric in type. This applies to colors also as well as form. The contraction of the colors is usually observed to leave the limits to be almost of the same size for each one. The next sign is a reversal of the colors and an interlacing. The first case illustrates this: J. B. 10 years old. The fields show concentric contraction for form and colors. Vision was 20/100. There were no visible signs of fundus pathology. Because of the suspicious character of the fields, the mother was more carefully questioned concerning the boy's habits. This revealed that the father had been out of work for some time and for this reason had been unduly severe with the boy. Vision and all eye symptoms disappeared after a family readjustment. The case of G. F. was that of post-traumatic hysteria. Vision was 20/100 in the right eye and 20/50 in the left. This case involved a suit for damages and the fields were instrumental in showing that there was no organic background for the lowered vision.

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#### DISCUSSION

L. L. NESBIT, M. D. (South Bend): I consider this paper quite complete and Dr. Dyar has presented many interesting cases. During the last four years I have examined a great number of pilots for the Department of Commerce and, until recently, all original examinations on pilots for transport and limited commercial licenses had to have complete perimetry.

I believe that, first, the contour of the face must be noted—that is, overhanging eyebrows with deep-

set eyes, long eyelashes, prominent nose, prominent cheek-bone—all must be taken into consideration and, in making the test, the head should be turned, or the eyelid lifted, that obstruction may be removed.

Lighting of the instrument is important, though not as easily solved as might first be thought.

The question of fatigue should be considered and the individual not kept too long at the test at any one time.

We all know that the elements of myopia and hyperopia must be considered when making these tests; the myopic persons have smaller fields while the hyperopic persons have larger fields. Then, of course, the acuteness of vision must be remembered. Persons with very low vision will show distorted fields.

In addition to this, I wish that there might be more standardization of the colors and sizes of test objects used in perimetry.

In short, there are many pitfalls, which the inexperienced may run into in performing these tests, that must be carefully avoided. I believe that the time consumed is the thing that makes it so little used, because it is a very valuable aid in diagnosis and, if we found only one early case of glaucoma in the course of a year's time, it would make it well worthwhile.

B. D. RAVIN, M. D. (Evansville): This has been a very interesting paper and I have enjoyed it very much. Those of us who do eye work see great value in perimetry but unfortunately there are those who still neglect it. Some of us have our nurses in our offices who are fairly well trained to make these fields, but I frequently have found that to get ideal results with perimetry, we should do the work ourselves, especially in mapping out scotomas. Every nurse, of course, can make use of the ordinary perimeter, but when it comes to making special fields or mapping out scotomas, they do not know how to do it. One type of condition not mentioned in the paper is disturbance of the pituitary body outside of tumors; that is, disturbance in which there is derangement of the general endocrine system. I have seen a number of such cases which have been referred by internists who suspected some possible pituitary disturbance, and they were very anxious to see what the fields of vision were. I recall one young man in the adolescent period who had a very marked pituitary insufficiency, and when first seen his fields were markedly concentrically contracted bilaterally. Over a period of one and one-half years we checked the boy each month, and under endocrine therapy it was amazing to see how the fields gradually opened and came up to normal. I have seen a number of such cases in women where there has been some questionable pituitary or ovarian disturbance. Under thyroid and pituitary treatment the fields gradually opened up. From the standpoint of the internist, it is extremely interesting because it gives an indication of what the prognosis is going to be.



## TRANSURETHRAL PROSTATIC RESECTION\*

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For wide advertisement and loud ballyhoo, especially to the laity, transurethral resection of bladder neck obstructions has easily gained the first place over any other procedure that has been developed, even in these times of rapid surgical advance.

It is my purpose in presenting this paper to open a discussion which might help to properly evaluate this method of rendering relief to those patients who are, as a class, not the most desirable surgical risks. Every effort will be made to credit the advantages as well as to criticize the shortcomings of what is really a most useful aid to urological surgery.

About two years ago, when the first thunder of the storm that was to break over the urological world began its rumbling, I wrote my impressions of cystoscopic resection, but since so much was being written by those whose clinical facilities were infinitely greater than mine, I decided to put my effort into storage and after the lapse of considerable time and more experience review it and see what changes had taken place, in my estimation, of the procedure. Strangely, there has been so little that I am going to incorporate that paper into this one, knowing that there are many whose opinions differ decidedly from mine.

A sketchy historical review will show that the efforts to relieve bladder neck obstructions by intra-urethral methods is not new. It is an evolution starting from an attempt made during the Franco-Prussian War.

After the efforts of Guthrie and Mercier, the cautery devised by Bottini was the first distinct advance. The results, however, were so unfortunate that it was not extensively used. The modification by Chetwood did not seem to improve the results.

Wishard worked out an ingenious operation by inserting a small rectal speculum through a perineal incision. He cut with a galvano-cautery knife and illuminated the field with a head mirror. This was probably the first time that the operation was guided by vision. The method must not have been an unqualified success, since it was not generally used.

The first of the transurethral methods to be a real success was the punch operation of Young. In spite of the danger from hemorrhage, the operation did what it was intended to do. The element of success was, in my opinion, due as much to the knowledge of the existing pathology as to the clever instrument. The punch was used for the removal of fibrous obstructions only, no attempt being made to remove adenomata.

Next, Caulk made a decided improvement on the punch by employing a cautery instead of a cold knife. There have been many modifications of the punch, most of them being through the use of high frequency current to control hemorrhage.

Much of the credit for the development of recent methods of resection belongs to Collings, whose high frequency knife, used through a McCarthy endoscope, was the first cutting instrument of this kind reported. Excellent work was done with this instrument and it should have a prominent place in the history of transurethral operations.

Of the many ingenious instruments recently devised, those of Stern-Davis and McCarthy are the ones most generally used, the difference being largely a matter of choice of the operator. This paper does not include the various points of advantage of any instrument.

The question that we must decide is the sphere of usefulness of this procedure, bearing in mind that many excellent methods of treatment of disease have fallen into disrepute because of misuse fathered by over-enthusiasm.

For removal of fibrous contractions of the bladder neck, I can think of no more perfect surgical measure than the clean-cut groove which so effectively removes the obstruction. This is without doubt the chief field of usefulness of the operation, and there can be no argument concerning the vast amount of time saved, as well as the comparative safety and convenience to the patient.

In carcinoma of the prostate where there is much obstruction, and there remains the choice of transurethral resection of enough of the growth to allow urination, or the permanent suprapubic drain, it must be considered as a godsend to the poor unfortunate whose short span of life can be made, at least, bearable. Even though several successive operations must be done, it is more than justified.

Concerning adenoma there seems to be a great difference of opinion regarding cases suitable for resection. While some surgeons claim that all cases should be resected, others think that only a small percentage should be so treated. There must be some sound, sane middle ground between these extremes. Undoubtedly the method may be used with perfect propriety in removing small median lobe obstructions and in very old and very undesirable risks, where the situation may be handled the same as a cancer—merely to palliate an intolerable condition, knowing that the patient would probably not survive extensive open surgery. In a comparatively young patient with no contraindication to open surgery, I feel that it is a great injustice to deprive this man of a radical cure when by subjecting him to incomplete removal he may have a recurrence when it is too late to offer him anything but palliation. In expressing this conviction I am well aware of the statement that scarring from cautery operations inhibits further development of the adenoma. This, however, is merely an opinion—whether correct or not remains

\* Presented before the North Central Branch, American Urological Association, Chicago, Oct. 12, 1933.

to be seen. Many urologists claim that recurrence after open operation is due to failure to remove all adenomatous lobules.

We are not in a position at this time to estimate with any degree of certainty the percentage of regrowths nor the time necessary for such regrowth to take place. We do know, however, that there have been many reoperations, some of which undoubtedly may have been due to the timidity of the operators who, in their early efforts, removed too little tissue. Another element that we are forced to take into consideration is that there are resections classed as satisfactory in the records of some surgeons, which have been subsequently prostatectomized by others.

In resecting large adenomata, the urethral trauma, as well as the time necessary to complete the operation, must be considered. Any slight advantage gained by saving of hospitalization time and probable lack of hemorrhage is more than counterbalanced by chances of irremedial damage by burning, as well as by the necessity of keeping the patient on the table for a great length of time if the removal of any considerable amount of tissue is contemplated.

Only a short time ago the operation was carelessly spoken of as a minor procedure. The realization that it is a major operation and that the patient must be properly prepared and given careful post-operative treatment will add much to its safety. Many surgeons are now going as far as using suprapubic drainage in preparation for the resection.

Our older pathologists have repeatedly told us that a considerable proportion of cases showed at autopsy that prostatic adenomata had degenerated into adeno-carcinomata. Knowing that there is always adenomatous tissue left in the gland, even though the functional results might be perfect, it will be interesting to observe for the next few years the influence of this method on the cancer register.

There seems to be a fascination about the operation that draws us to it in spite, at times, of our better judgment. This lure may be the avidity with which the patient accepts resection in preference to what he calls an operation, the apparent ease of performance, the ability to stop at any time and to continue later if necessary, or it may be that we are relieved of dirty dressings and the patient of an aquatic life during convalescence.

Not the least interesting of the development of this operation is the terminology. It is spoken of as a resection, which is a good term, since resect means to pare off, to cut away. Also, since the word comes from the root "secare," to cut, and the prefix "re" meaning again, it still is perfectly correct because of the ultimate fate of many cases. Another term, revision, caused me to consult every dictionary in our public libraries, only to find that the word is from revise, to see again, to re-examine for correction, etc. Judging from the delightfully

frank statements of some revisionists, I again grant the propriety of the term.

In conclusion, let me repeat that the operation is in all respects a major surgical procedure, the fatalities from which have been greater than some of the most ardent devotees care to admit. That, in a considerable number of cases of adenoma, the results are unsatisfactory, requiring reoperation, either by resection or enucleation. That the future development of carcinoma or regrowth of adenoma must be considered. That for removal of obstructions from fibrous bars and in certain selected cases of adenoma, as well as in palliation of carcinoma, the method is par excellence.

In any event we have in this operation a most valuable aid to urological surgery which time and experience will put in its proper place.

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## ECONOMIC PROGRESS IN MEDICINE\*

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A writer has made the statement that if one wished to understand the beginning of the profession of medicine, he would have only to go to the most primitive tribes and study their methods of caring for the sick. This statement was made with reference to scientific medicine, but is equally true of medical economics. Among those tribes the medicine man ranks next to the chief in importance, and it is necessary that a man preparing for this work go through an apprenticeship before he is eligible. While the medicine man's practice consists mostly of magic, he does use some drugs and appliances. His equipment for carrying on his profession is simple and supplied to him by nature. His remuneration is mainly gratuities. While he has no fixed charges, he probably does some bargaining when he can. If he has good luck with his cases, his reputation becomes great. If he has an excessive amount of bad luck, he becomes discredited, and in addition to losing his practice may lose his head.

In the written history of medicine we find that the same was true of medical practice among early nations. The physician was not supposed to have bad luck. If a patient died during an operation, the doctor might be fined, have his right hand cut off, be imprisoned, or lose his life. The results at the present time are not quite that dire, yet we find ourselves blamed for bad results when perhaps conditions over which we have no control make our cases turn out unfavorably.

The first teaching in the preparation for the practice of medicine was individual. We had what might be termed a "one-man" medical college. The students were taught singly or in groups. There probably was no tuition, the student helping his

\* Presidential address delivered before the Marion County Medical Society, January 2, 1934.



preceptor in return for his instruction. Within the memory of some of the older practitioners in this state, this training for the profession was in effect throughout Indiana. This apprenticeship was usually supplemented by a short course of lectures in some medical college. This course of lectures seldom consisted of more than six or twelve months' actual attendance at the college with no preliminary scholastic requirements.

About fifty years ago, in this country, the campaign for a more rigid preparation for the profession began. At that time the necessary requirements in order to practice medicine consisted of graduation from high school before admittance to medical college, plus four years of study at the medical college. Even the necessity of spending that length of time in the preparation was not obligatory in some localities. In New England some medical colleges gave a six-months' course of lectures. In one college the lectures began January first and in a neighboring college lectures began July first. This enabled the student to attend one college from January first to July first and another from July first to January first. In this way his Doctor of Medicine (M. D.) degree was obtained in two years.

Requirements have become increasingly more rigid until at the present time all class "A" colleges require six years of study after graduation from high school. Some colleges do not grant the M. D. degree until the student has completed a year of internship in an approved hospital. The educational requirements in medical colleges have become standardized and are practically the same throughout the United States at the present time. In regard to our present educational system there are some questions which should be carefully considered:

1. Is our educational training adequate for the successful conduct of our business?
2. Is it too long a training?
3. Should there be, as there is in some countries, a difference in the training for men for practice in rural communities from those practicing in cities?
4. Should there be a standard of educational qualifications for men who designate themselves as specialists? If so, by whom should these qualifications be set out?
5. Are there too many men taking up the study of medicine? If so, how may this number be decreased?

One may say that these questions should be answered by the medical colleges. That is not true. It is the duty of men who have been in the practice for a number of years to express opinions and offer suggestions to the medical colleges as to how present methods of teaching should be changed to make the profession more proficient in handling its business. We find that the colleges are always ready and willing to follow these suggestions if it

can be shown that they are of value. After completing our education we must obtain our license to practice.

#### EARLY REQUIREMENTS

In discussing the early requirements for practicing medicine in Indiana, I am indebted to Dr. William N. Wishard, Sr., for the following, which was taken from an article, entitled "The Pioneer Doctor—Some of His Handicaps":

"On December 24, 1816, shortly after Indiana became a state, the Legislature passed a medical law providing for the appointment of examining boards in different districts of the state. This law was the direct result of the desire of the early pioneer physicians to require higher professional qualifications. The law had a good effect during the fifteen or sixteen years it was in operation. There are still in existence a few of the old certificates issued to pioneer physicians who had passed examinations by one or another of the different district examining boards. There were too many boards, however, as one existed in each judicial district, and lack of contact with each other and opportunity to confer on a uniform method of conducting examinations and other causes seem to have led to dissatisfaction with the law, which was repealed some fifteen years after it was enacted.

"From the time of its repeal there were fifty-five years in the history of Indiana when quackery ran rampant. No medical law existed between the repeal of the medical law in 1830 and the enactment of the so-called Edmund's Law in 1885. The latter was merely a registration law, requiring the applicant for a license to file his diploma with the county clerk, who, after examining it, would issue to him a license. It proved a productive source for the development of 'diploma mills.' In 1897 the present medical law was enacted and has been helpfully amended at subsequent sessions of the legislature. When the law of 1897 was passed, there were seven medical schools, or so-called medical schools, in Indiana. Only two or three of them were worthy of the name. Under the provisions of this law the state board is authorized to define what constitutes a medical college and to pass on the validity of diplomas. The board soon adopted the standard of the American Medical College Association, and the seven schools have all disappeared. Three of them were merged into the Indiana University School of Medicine, which is the only legally authorized medical educational institution in the state of Indiana today."

Dr. W. N. Wishard was appointed by the President of the Indiana State Medical Association to draw up the first medical practice law and obtain its passage in the legislature.

After meeting the requirements for a license to practice medicine, the next step is the selection of a location for establishing an office. We here see a trend that has been brought about by increased cost of medical education which is the location of an increasing number of men in the cities and larger communities rather than in the small country towns. A man who has spent as much money on his education as the present student has to spend does not relish settling in a community where the returns are bound to be small.

Setting up an office has become a much more expensive affair than it was in the early days. The pioneer country doctor had none of the expensive equipment which is now thought necessary. A man entering the practice of medicine fifty years ago always had his office in his residence. The furnishings of his office were inexpensive. The drugs used were simple, prepared by himself or his wife,

and contained none of the expensive pharmaceutical preparations that we use at the present time. No elaborate laboratory equipment was considered necessary. His transportation was a horse-drawn vehicle instead of the high-powered automobile of today. As one can see, the equipment necessary to start the practice of medicine was inexpensive compared to present requirements.

#### PREPARATION TO PRACTICE

Questions which we should consider in regard to our immediate preparation to practice are:

1. Are our medical practice laws adequate? If not, where are they lacking and in what way should they be changed to better our professional standards?
2. Are our expenses in setting up our office too great? If so, in what way can they be changed to reduce them?
3. Would it be of value for us to do more "group" practice in order to decrease our overhead?

The methods of conducting the business of practicing medicine have undergone even more changes than the education and setting up of the office. In the early days the doctor took care of all cases coming to him. There were few, if any, doctors who devoted themselves exclusively to one branch of medicine. The first men to specialize were the teachers in the medical colleges who were authorities on the branch of medicine which they taught. This has been changed and at present we have many men doing special work who have done no general practice, and are not teachers. We have many self-styled specialists who have had little or no training in their line of work.

Organized medicine, as we know it at present, is of rather recent origin, although medical societies have been in existence for centuries. Every one of us is familiar with the present set-up; the county society acts as the basic unit, then the district, the state and the national associations.

It is very important for every man in the profession to be a member of organized medicine. It is through these societies that we are able to continue our education, by an exchange of ideas. We have a group of men whose combined effort in handling problems which come to them will be far better than when handled individually.

Any legislation which is advantageous to the profession can be supported and adverse legislation can be fought more successfully by a group than by one person.

The constant association of people interested in the same line of work is always to the advantage of the individuals. It is only by organization and cooperation that advancement can be made in any line of endeavor. The most noticeable progress we have made in this line has been the closer alliance between the county, state and national organizations, with the eliminating of factional strife, and the mutual help which one unit has given to

another. This refers especially to the help which the state and national associations have always been ready to extend to the local county societies in solving their individual problems.

There is an increased willingness shown by organized medicine to take up the questions before the profession and make an effort to find the best solution of them. A doctor who is not a member of organized medicine not only is missing much, but is also a parasite because he is profiting by work which is done by an association to which he contributes nothing.

There will be an increasing amount of work that the association will have to do and many difficult problems which will have to be solved in the very near future. A few of them are the questions that have been mentioned under the different subjects of this paper.

To realize the advantage of organization we have only to compare the condition of the profession before organized medicine came into being with the present state. Yet we have accomplished only a part of what can be done towards improving the conditions of the profession.

Every medical practice act on the statute books has been put there through the efforts of organized medicine. Also every advance in educational qualifications for practice has been sponsored by this body.

Preventive medicine and public health programs have had a decided economic influence upon our profession. There has been an enormous advance made in this line of work. Unfortunately the profession in general has not taken the interest and active part in this that it should have done; consequently, much of it has been done by men who are not graduates in medicine. Some of the universities have established public health schools, whose directors are not even graduates of medicine. The real pioneer work in preventive medicine has always been done by doctors. Probably the most progressive work has been the steady fight waged against the most dreaded diseases of childhood and what might be termed "climatic diseases." This warfare against diseases has met many discouragements and bitter battles with cults and ignorance. Too many times we, as a profession, have been accused of self interest when we have advocated that rural communities with bad water supplies be inoculated against typhoid and that all children be immunized against diphtheria and smallpox. We have made very distinct progress along these lines and may find the road easier as we are able to further develop immunization against disease. This field of medicine probably offers more for the upbuilding and stabilization of our profession than any other one thing. We should see that it is kept under our direct control.

During the last half of the nineteenth century the hospitals began to come into being, but were used only rarely by the profession in general. At the beginning of the twentieth century only a very



small number of the doctors used the hospitals to any great extent and none of them limited their practice to hospital cases. At present most men doing special work do not attempt any cases unless they are in the hospitals. This fact, while it has perhaps simplified and consolidated the doctors' work, has greatly added to the financial burden of the laity in caring for their illness and has added an increased burden on the taxpayer whose money must go to the support of our charity hospitals.

At the start, hospitals were small and unattractive and were operated mainly as a refuge for certain unfortunate cases which could not be taken care of at home. Mental cases were the first kind of cases cared for under governmental control. Later on we had the feeble-minded, epileptic, tuberculous, etc. This grouping of cases was conducive to a more intensive study of these diseases and consequently a better understanding of them, which eventually led to more intelligent treatment. Development of surgery brought an increased demand for hospitalization because the surgeons could do more work in the hospital than in the home.

As the hospitals developed, more and more money was spent upon their buildings and equipment, until the cost of even a small hospital would seem enormously expensive to a medical practitioner of fifty years ago. There has been an effort, among some of the leaders in the profession, to curb the expense of hospitalization by cutting down the expense of the building; but it is doubtful if they can stop the competition which seems to be evident between hospitals to make their new buildings a little better than those of their rivals. Hospitals have been developed perhaps beyond what is really needed until we have many of them offering services for which few patients are financially able to pay; hence, most of the large, elaborately constructed hospitals are in financial difficulties.

Charity hospitals and clinics gave us an opportunity to develop experimental medicine which has been a fertile field in present day medicine. In this line of work we are able to try out new methods and remedies and evaluate them. Hospitals have improved our record keeping. No study can be carried out without accurate statistics. This has been reflected in the record routine of men in general practice. Most of the men who are endeavoring to keep up with the rest of the profession have been keeping careful records of their cases.

The laboratories with their expensive fittings and equipment are no small part of the financial burden which is put upon the diagnosing and treatment of disease. These things have come to stay. We, as a profession, have educated the laity to be hospital and laboratory conscious, and it is up to us to find the answer to the question of how to pay sickness bills. It is the endeavor of the public to solve this problem which has started the various forms of sickness insurance, clinics, lodge practice, etc.

Hospitals and clinics have shown a steady ad-

vance and they are always grouped together in their work. The formation of group clinics is probably the first united effort that was made by the doctors to lower the cost of conducting their business. Group clinics are distinctly a middle western enterprise. In the United States there are one hundred and fifty group clinics, most of which are located in this section of the country.<sup>1</sup> There is much criticism of these groups, both favorable and unfavorable. The favorable ones are:

1. Grouping a number of doctors in one office where the work can be conducted with minimum overhead.
2. Large groups composed of a man for each special line so that all kinds of cases can be cared for.
3. Business and records of the individual doctors can be taken care of much more easily.

Advantages to the patient are:

1. His case can be diagnosed in a much shorter time.
2. He has but one fee to pay, that fee being divided among various members of the group.

Disadvantages to the patient are:

1. There is a loss of individuality so often demanded by the patient. We have to recognize the fact that the practice of medicine has always been individualistic and should remain so.
2. The patient may have an aversion to one man connected with a group; consequently, he refuses to go to this clinic for services.
3. There is liable to be some dissension between the clinic groups and men in the profession who are not connected with the group.

When organized charity became a definite part of medical practice the burden fell upon the profession. It was started in a small way. First, the doctor was asked to make a few calls at home and see a few patients in his office. The doctors doing this work encouraged the enlargement of the field until at present we have large free hospitals and clinics whose privileges have been at times greatly abused. Perhaps there is not as much abuse as we are led to believe. Honest investigators who have given much time to this subject find, in the various clinics, abuse runs from two to seven per cent. I am sure the percentage will not run above that in this city. Here again, in this field, the doctors have neglected looking after their own interests. They have allowed this to go on for a long time, have had plenty of opportunities to correct the situation, but have not done so. Therefore, we have only ourselves to blame for any abuses that have arisen in this direction. What effort have we made to get remuneration for our services in this work?

We all realize that medical charges cannot be standardized. We should give but one kind of service—the best that is possible for us to give. We

<sup>1</sup> "The Purchase of Medical Care."—Pierce Williams.

are entitled at least to a living in our profession and we should see that we get it.

Charges for medical services have undergone changes. The standard charge of pioneer doctors for an office call, with medicine furnished, was twenty-five cents. When we consider what the cost has been to obtain medical education and furnish an office, we can see that we should receive five dollars for the same service; but there is another factor which comes into the case. With increased traveling facilities and grouping of cases in hospitals we are able to do four times the amount of work that could be done by a doctor thirty years ago. Operations fifty years ago seldom cost over fifty dollars, and the top price for obstetrics was fifteen dollars. When we consider what was given in this line then, perhaps the cost was more than it was worth. Surgery and obstetrics have made considerable progress, but we should not be satisfied with what has been accomplished; we should push on toward perfection.

About fifty years ago in Germany the first state health insurance law was established. Before that time there had been, in all countries, various organizations and groups, which, for fixed periodic payments, paid to the individual certain sums of money when they were ill. These sickness societies were always local in character and were successful in a great measure because all members were friends and neighbors, and there was little chance of malingering. The establishment of this insurance was purely a political move on the part of Chancellor Bismarck to conciliate or thwart the Socialists. The doctors refused to have anything to do with setting up the law; consequently, the work was turned over to the Krankenkasson.

These societies hired the doctors to do the work. There has been constant strife between these societies and the doctors for fifty years, which has had a decidedly bad influence upon the profession in general.

Following the establishment of health insurance in Germany, it spread to other countries in Europe until we have this plan of taking care of sickness in most of the large countries in Europe.

In the United States there was some attempt made to establish this form of medicine, and there will probably be other similar movements in the near future. The recent investigation of the committee to study the cost of medical care brought to us many interesting facts which we should study carefully and use when considering this subject.

Fortunately, their plans for a solution of these costs have not met with success up to the present, but there is a strong body of social welfare people working to bring this about, and with the present trend toward socialism in this country, it will be to our advantage to watch carefully all the efforts being made by these workers.

The profession should take an active part in all the deliberations of bodies working on projects which are connected with our business, no matter

of how little importance they may seem to be. It is the basic unit, the county society, which can do the most effective work along these lines.

Contract practice, which has been on the increase in recent years, must be watched closely to see that no unfair contract practice is established. Many fixed periodic payment plans for sickness have come into being in recent years. Most of them are in frank violation of the code of ethics of the profession. Many of them are run for profit, and a few of them cannot be criticised but probably would become a menace after being well established. There will always be a certain amount of contract practice in the profession. Perhaps some form of fixed periodic payments to cover sickness bills may be the best way for the profession to get its remuneration, but before putting the seal of approval upon it, the plan should be studied very thoroughly.

In studying methods of getting our remuneration, we should see what has been done in the past and what progress has been made. The early doctor, whom we recall, never thought of rendering a statement for services oftener than once a year. This has been changed until at the present time most doctors follow the custom of sending monthly statements and adopt some sort of collection system for delinquent accounts. Most of us have found the average collection bureau so unsatisfactory that many county societies over the country have taken over this work themselves. There seems to be an effort made among those in the profession to look after their own business, which is a healthy sign.

There is unquestionably a strong movement on foot from outside organizations to get into our business and manage it for us. The next few years will see many plans tried, most of which will fail utterly; some will have a small amount of success; none will be entirely successful.

Organized medicine should let it be distinctly understood by every outside force which may be trying to run our business, that this is our affair and we are not only capable, but determined to run it.

In closing, what can we learn from the study of the economic progress of medicine?

1. That as scientific medicine advances there must be an increase in the cost of preparation to practice; also of the expenses of conducting our business.
2. If we follow the rules for success in business we must give some attention as to how we are going to get financial returns sufficient to meet our overhead.
3. Every member of the profession must be allied with organized medicine.
4. We should impress upon the public that, while we are not money mad, we have to protect ourselves financially by demanding a just return for our investment.



5. Instead of ranting against the laity in their plans to make it easier for them to meet their sickness bills, we should work with them in order that any plans which they may try to formulate will take care of our interests and better the work that we can do.
6. That when we study this question we should take it up as an entirety. Let us consider it from all its angles. Is the cost of medical education too high? If it is, where can it be reduced? Is the cost of equipping our offices too much? Does it cost more than necessary to conduct our business? There are several other questions which might be asked.
7. We should take some measures to control the indiscriminate charity work which is being saddled upon the profession.
8. Charity hospitals, either state or city controlled, should limit themselves strictly to charity cases and have no part or full pay cases in order to keep them from direct competition with the profession.
9. We must always keep up with the times. At present there is a decided socialistic tendency throughout the whole world as is evidenced in government particularly; but it is slowly edging its way into all of our activities and we may be sure the profession will not escape.
10. We can no longer isolate ourselves under the plea that our profession has always been individualistic and will remain so, until the end of time. Maybe that is true but we have seen many things which we thought were unalterably fixed that have been changed over night. It is far better to be prepared for a change which does not come than to be caught unprepared.
11. We must unite all of our forces, not only in the medical profession, but also our allies, to present a front strong enough to make a showing against our foes. We hear much of the dissension within our ranks. It has been told so often to the people outside the profession that they have come to believe that we are wholly disorganized, which is not true. The facts of the case are that never in the history of medicine has the profession been more closely united. Organized medicine is stronger than it has ever been before.
12. Let us remember that we have an honorable past history and that it is up to us to carry on the battle for the present in order that we may hand down to our successors the banner unsullied by charges of weakness and cowardice in meeting our problems.
13. It should be kept in mind that medicine is our business and we should put our whole energy into making a success of it.

## FEEDING THE NORMAL BABY\*

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Average normal babies are well when they are born. The aim of modern pediatrics is to keep them well. To this end, the importance of proper feeding is obvious.

Nature provides ideal food in normal breast milk, but it is well known that not all mothers can successfully nurse their babies. The real test of success is the progress of the baby, and, when satisfactory, breast feeding should by all means be continued. If the baby's progress is not satisfactory, it is well to attempt to improve the breast milk or the technic of nursing, in the hope that breast feeding may become successful.

Many babies suffer from "three months colic." These are usually hungry babies. It is not wise for a mother to insist on keeping a hungry baby on breast feedings exclusively, but she should provide other food by means of complementary feedings.

When there is an insufficient supply of breast milk, other human milk should be provided, if possible. Except in large cities, where wet nurse stations have been established, it is difficult to obtain breast milk. The expense of a wet nurse in the home may be prohibitive. Therefore, the only practical alternative is the use of artificial food.

Artificial feeding has not always borne a good reputation. It has been said that it is responsible for three fourths of the illness of babies, and, further, that four bottle-fed babies die to one breast-fed.

The feeding of an infant deprived of breast milk is worth the best effort of the physician. No class of patients makes finer response than do babies who are fed carefully and intelligently. Those who have been improperly fed generally show some deviation from normal. They would have been all right had their feeding been right and they will be all right if suitable food is provided.

The responsibility of the care of most infants has fallen upon family physicians. Fortunately, with acceptable artificial feedings it is now possible to approach, if not match, the results of successful breast feeding.

The problem is: What shall be substituted for mother's milk? A baby eats neither percentages, calories or methods. He must have proteins, fats, carbohydrates, mineral salts and water, together with vitamins. The food must be digestible, and fluid or semifluid in consistency.

These requirements are most practically and economically met by the use of modified cow's milk. Ordinarily whole milk cannot be fed to young infants. When diluted there is decrease in all of the solid constituents. The reduction of proteins is desirable, and it is possible to use formulas with a diminished fat percentage. But one must make

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up the deficiency of carbohydrates. The actual problem becomes: How much milk shall be used, how much water and how much sugar?

Babies differ in their food requirements. Every baby is an individual and must be treated as such. The food must be fitted to the baby, and not the baby to the food. Therefore there is need for calculating formulas for each baby individually. All any method or system can do is to serve as a guide and indicate how much milk, water and sugar shall be used for a given infant.

Assuming the correct formula has been calculated, it is well to dilute it to one-third or one-half in beginning its use. Thus the baby is given an opportunity to become accustomed to the food and later the feedings may be gradually increased to the required amount. There is the temptation, for fear of loss of weight or failure to gain, to start a baby on a full formula. When this is done there is always danger of digestive disturbance.

Formerly the indigestibility of the protein curds was a serious handicap in the use of cow's milk. It can be prevented or minimized by the very simple process of boiling the milk and water together for three minutes. Similar results are possible with the use of evaporated or powdered milk.

The choice of carbohydrate is a matter of personal preference. Lactose, cane sugar, or the mixtures of dextrins and maltose are most commonly used.

Water is the chief constituent of milk, for milk is almost ninety per cent water. When modified for infant feeding, more water is added. The younger the baby, the more water in the feeding bottles. There is enough to meet his requirements. Hence, young babies need no water between feedings. The little hot water bottles offered to quiet them merely serve as glorified pacifiers.

Young babies do well on a three hour schedule, without the hot water bottles between the feedings. Later, at four or five months, a four hour schedule may be ordered. There has been a tendency to lengthen the intervals between the feedings and put all babies on a four hour schedule from birth. The pendulum has even swung so far that a three meal a day schedule for babies of six months is urged. It remains to be seen if such a program has merit.

That babies do well on simple milk mixtures may be asserted from personal experience. My observation of other types of feedings has been possible in the care of babies who did not thrive on them. These have generally responded promptly and kindly to feedings of milk, water and sugar. If, after considerable injury has been done by other feedings, these babies have made satisfactory progress with simple mixtures, it is reasonable to assume they could have taken them in the first place.

The plea is made for the use of simple feedings. They are successful, economical and their preparation does not impose a task on the mother.

A physician should be conservative and patient.

There is no need to experiment with every type and manner of infant feeding suggested. If the physician is competent, he should approach his problems of infant feeding with confidence, and not be awed by the professor's latest dictum nor swayed by the detail man's friendly chat.

Commercially prepared foods are of several types. One group is made up of preparations of milk, as condensed, evaporated or powdered milk. Another group is of materials used in modifying milk. A third group has been developed as complete foods, that is, as perfect substitutes for mother's milk. There may be occasion for the use of milk other than fluid milk. There is a legitimate field for certain carbohydrate modifiers. There is no need for the synthetic-breast-milk type of foods. The infant food manufacturer "pushes his goods." He submits scientific data, clinical histories, charts, pictures of rats and detailed analyses. All of this makes infant foods expensive. Physicians are primarily interested in getting the best possible food, but without undue cost to the parents.

Formerly the use of acidified milk was much in vogue. It failed to provide a perfect substitute for mother's milk. The use of sour milk in the feeding of normal babies is no longer encouraged.

Lately there has been considerable discussion of soft curd milk. In our community such milk is offered, at an advanced cost of course. Mothers are importuned by the dairyman to buy this milk, because it is more nutritious and more readily digested. It has even been offered as a perfect substitute for breast milk, to be used without dilution or sugar supplementation. Competent clinical observers have reported that soft curd milk offers no advantages and its caloric value is less than ordinary milk. No baby will suffer from lack of soft curd milk.

Lately the importance of mineral salts has been emphasized. Since human and cow's milk are deficient in iron and the baby soon uses up his reserve iron, it is asserted that it is necessary to introduce iron-containing foods. Strained vegetables are recommended, as early as two months, and even six weeks. Since the preparation of such food adds to the burdens of the mothers, several canning companies have marketed strained foods. They have become popular.

Examination of the analyses furnished by the producers of these foods discloses that iron is present in very minute quantity, about one part of iron to 150,000 parts of food. The caloric value of the food is, in general, much less than that of milk, and dependent chiefly upon the carbohydrate content. Milk contains more solids than the strained foods. The cost of these foods is out of all proportion to their value as foods. Up to the present there is no definite proof that strained foods are necessary, or that their use is followed by benefit, so far as iron retention or change in the blood picture is concerned. Neither has there been proof that they are harmful.



No one questions that the baby needs vitamins. He may get them without all the special preparations on the market. Practically every known vitamin is present in a well balanced diet of ordinary foodstuffs. For the young infant, vitamin C may be supplied by orange or tomato juice, and vitamin D by the fish liver oils or viosterol.

At present there is a vitamin craze. Lately a lecturer appeared before a club in South Bend. He was introduced as a doctor of medicine. He talked on vitamins and stated that 80% of the school children of South Bend are suffering from rickets! How did he know? He probably did not examine one child. His statement was published in the papers. In a few days there appeared a broadside advertisement of vitamin D bread, quoting the lecturing doctor and advising the parents of the community to prevent and cure rickets by feeding their children vitamin D bread. Not to be outdone, a neighboring packing house is advertising vitamin D sausages and wieners. It behooves a conservative physician to remain calm and serene during this vitamin agitation. No baby is going to suffer if ordinary common sense be used.

The attempt has been made to stress simplicity, economy and conservatism in infant feeding. The approach to the subject has been influenced and directed by my own experience. For the average physician there is no need to depart from conservative practices which in the past have proved their merit.

There is an ancient rule in medicine "Primum, non nocere," meaning, "First, do no harm." To this all must agree. Another rule might be suggested, "Discard the unnecessary." After all, the simplest things are the best.

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## ACUTE INTESTINAL OBSTRUCTION\*

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There is no condition which confronts a physician or abdominal surgeon that can cause more concern than acute intestinal ileus. When the condition arises, it requires prompt diagnosis and immediate relief to save the patient's life. A realization of the rapidity with which many patients die as a result of bowel obstruction has led in the last few years to considerable experimentation to determine the causative factors which so rapidly cause the death of the patient. Many investigators, stimulated by the work of Haden and Orr, have been working more or less simultaneously on this problem and have arrived at conclusions that are similar yet somewhat variable. It is not my purpose to discuss all of these reports in detail, but to summarize some of them.

It is quite evident to all that simple blocking of the intestinal passageway so that the canal is

occluded and normal intestinal movements interrupted should not in itself be the cause of such profound symptoms as often readily develop after the obstruction occurs.

Haden and Orr first pointed out the different changes that occur in the blood chemistry as a result of acute obstruction to the small bowel. They have shown that there occurs a marked fall in blood chlorides and a subsequent increase in the urea and non-protein nitrogen, this increase being greatest in the last twenty-four hours of an animal's life. Accompanying the fall in chlorides there is a marked increase in the carbon dioxide combining power of the plasma, or in other words, an increase in the alkalosis of the plasma. Haden and Orr chose to assume that this fall of chlorides was due to fixation of the chloride ion in the body tissues by a toxin from the obstructed bowel. They were able to keep alive dogs with duodenal obstructions for twenty to thirty days by frequent hypodermic injections of sodium chloride, while controls died in three to five days.

Foster and Hausler disagreed with the views of Haden and Orr and concluded that death in uncomplicated cases of acute intestinal obstruction is due to dehydration and starvation, that there is no evidence of toxemia, and that hypochloremia is not present. They, however, called attention to two types of intestinal obstruction: (1) acute simple obstruction in which there is complete blocking of the lumen without circulatory involvement, and (2) acute strangulation in which there is interference with venous, arterial and lymphatic circulation as well as obstruction to the intestinal lumen.

Gatch and Trusler, working with this problem, have agreed with Haden and Orr that a definite hypochloremia, decreased blood chlorides and alkalosis do result early in the course of an acute obstruction. They did not believe that it was due to fixation of chlorides in the tissues, but found that this decrease in blood chlorides was directly proportional to the chlorides lost by the animal, which occurred chiefly through vomiting. They, however, agreed with Foster and Hausler that it is quite necessary to recognize two types of obstructions, simple obstruction and obstruction with strangulation. They found that dogs with acute simple obstruction may be kept alive throughout the period of starvation by the hypodermic administrations of sodium chloride and water, but that this treatment is of little or no value in cases of acute strangulation. They felt that in acute simple obstruction the intact mucosa of the intestine prevents absorption of the toxins from the lumen, hence there is no toxemia. The giving of sodium chloride solution by hypodermoclysis prevents death from dehydration and hypochloremia. However, with the slightest degree of strangulation they thought the absorption of toxins ensues and the treatment with salt does not prevent death from this toxemia. They did not find, however, that the course of the toxemia may be mitigated and death delayed by

\* Presented before the Gibson County Medical Society, Nov. 20, 1932.

transfusions with sodium chlorides of rather large amounts, the beneficial action being due to support of the general circulation and an increased kidney elimination. Gatch and his coworkers did not determine the exact nature of the toxin, which so rapidly produces death in cases of acute strangulation, but believed that it is a histamine-like substance found in the bowel contents of the obstructed bowel and therefore consider drainage of the obstructed segments an essential of treatment.

Numerous other theories have been advanced to explain the source of this toxemia. In all, there are five general classes or groups of substances mentioned as the source of the toxemia.

1. Toxins resulting from putrefaction of stagnated foods within the intestinal canal. Magnus-Alsleben found that following intestinal obstruction, ingestion of any food other than milk invariably produced a toxin. Cannon and others found that in intestinal obstruction diet had no effect on the bacterial flora. The more or less general opinion now is that there is relatively little evidence to support the theory that intoxication is the result of absorption of putrefactive substances.

2. Toxins arising from bacterial invasion of the obstructed gut. Recently Williams, an English surgeon, and others have advanced the theory that the intoxication is due to a bacillus *Welchii* infection. Good clinical results have been reported following the use of immune serum in the treatment of these cases. Others who have tried this report no favorable results. This source of the toxemia is generally minimized.

3. Intoxication resulting from the absorption of secretions in an abnormal way, or secretions that have not been detoxified. Draper believes that most of the intoxications are the result of absorption of the duodenal as well as the pancreatic secretions before they can be detoxified by the ileal cells. As proof of the detoxifying power of the cells of the lower jejunum and ileum he fed animals with intestinal obstruction cells derived from the lower jejunum and ileum and found that they lived twice as long as the control animals.

4. Intoxication produced by the absorption of perverted intestinal secretions. Whipple and Stone believe that in obstruction the normal function of the cells of the duodenum is lost and that they secrete a substance which is toxic.

5. Bacteremia—The theory that the toxemia is due to absorption of bacteria is at present not accepted.

Of this toxin Orr says, "Attention has been chiefly centered upon the content of the obstructed gut in an effort to explain the development and absorption of a toxin. Any theory based upon the absorption of pathological products developed within the obstructed bowel to date have fallen short of an adequate explanation of the symptomatology and pathology of the disease. Recently the subject has been approached from the standpoint of perverted physiology and alteration of the chemical balance of the body. Much experimental evidence has ac-

cumulated which shows the importance of a loss of upper intestinal tract secretions. A complete drainage of the stomach will cause death. A complete drainage of the pancreatic juice will cause death. A complete drainage of the duodenum or upper jejunum will cause death. There is therefore abundant evidence that a loss of the upper gastrointestinal tract secretions will result fatally. A loss of these secretions by jejunostomy causes changes in the blood chemistry similar to those found in high intestinal occlusion. The old idea that the content of an obstructed gut when released into the normal gut below will produce death has definitely been proved to be erroneous. In fact, quite the opposite has been true. The life of animals may be prolonged by deliberately injecting the stagnated content from above an obstruction into the normal bowel below. Substances accumulate in the obstructed gut which are essential to life. Toxic substances such as histamine injected into obstructed gut is not absorbed." Orr concludes that the only logical conclusion to be drawn is that the lethal factors are produced by a loss of secretions from the stomach and upper intestines which are essential to life, associated with a marked development of hypochloremia and dehydration.

Recently, White and Fender seem to show quite conclusively that no toxin is produced in the intestine above the obstruction because they have kept alive an obstructed animal for twenty-eight days by restoring through an ileostomy below the obstruction the materials lost in the vomitus.

The question naturally arises, Why is death so much more rapid when the obstruction is just below the level of the entrance of the bile and pancreatic ducts than when the obstruction is just above these or lower down in the jejunum? Wilkie suggests that the essential difference between the high and low obstruction would appear to be the loss of all the digestive secretions by vomiting which attends high obstruction but occurs late in lower obstructions.

Brockman claims good results in combating obstruction by injecting bile by rectum. Benedict and coworkers have attempted to study the role of bile in high obstructions and conclude that when the obstruction of the intestine is so high that no bile can be reabsorbed, the experiments suggest that the administration of bile below the obstruction may be of benefit. However, in lower obstructions where some reabsorption is present there is no special advantage to be derived from the injection of bile into the intestinal tract.

It would seem then that at the present time there is more or less general agreement that there are three death producing factors in acute obstruction: (1) Dehydration; (2) blood changes—hypochloremia and alkalosis; and (3) a toxemia, the cause of which is undetermined and the nature of which is uncertain. Some writers feel that there is a definite toxin present while the more recent writers believe the picture is produced by the loss of secretions from the stomach and intestines which



are essential to life. This problem should be settled because it is of definite importance in the treatment of these patients. We will await with interest more scientific study of this phase of the problem.

#### Symptoms of acute intestinal obstruction:

The onset is marked by abdominal pain, vomiting, obstipation and shock. If there is strangulation the pain is severe and constant and there are frequent colicky exacerbations. The continuous pain is due to constriction and strangulation, the exacerbation to the colic of peristalsis. If the small bowel is involved the pain is in the region of the umbilicus; in large bowel obstruction the pain is at the site of the pathology. Later when the bowel becomes paralyzed the pain temporarily abates. In considering obstruction it is essential to differentiate between two varieties of ileus, mechanical and adynamic. In adynamic or paralytic ileus the characteristic colic pains are more or less absent. In all cases of mechanical ileus there is a certain amount of adynamic ileus superimposed when the ileus has existed a relatively long time.

Vomiting comes on soon after the pain but does not give relief. It continues whether food or drink is taken or not. The vomited material is at first stomach contents, later it contains bile, and finally is of a brownish, stinky material. The vomiting is forceful. Diagnosis should be made before this so-called fecal vomiting occurs because this is relatively late in the illness.

Obstipation is present and the patient is unable to pass gas or feces. It is well to remember that early following the obstruction, however, the patient may have one or two bowel evacuations, emptying the bowel below the obstruction. After this the lower bowel is inactive and often the patient cannot expel an enema.

Shock usually occurs early and may be profound, often making the diagnosis uncertain and leading one to suspect internal hemorrhage. The degree of shock should make one suspect the extent of the pathology. It is more severe when strangulation is extensive.

Examination of the abdomen may reveal nothing of significance, especially in high obstruction. When the obstruction is low down in the small bowel there may be considerable distention proximal to the obstruction with the typical ladder pattern abdomen. The absence of distention should never cause one to hesitate in making a diagnosis. One should not wait for the ladder pattern which is caused by a considerably distended gut and occurs relatively late in the illness. Auscultation of the abdomen should always be done in a suspected obstruction. In fact, auscultation should be carried out when examining every abdomen. Its aid in the diagnosis of obscure abdominal conditions is almost equal to its value in diagnosing diseases of the heart and should be routinely practiced. In acute bowel obstruction there is increased peristaltic activity which can easily be elicited by auscultation. In the adynamic variety which occurs in peritonitis

and late in mechanical obstruction the abdomen is "ominously silent," sometimes expressed, "silent as the grave."

#### DIAGNOSIS

When a diagnosis of this condition is easy and all the classical symptoms and signs are present, it is often too late to save the patient's life. In high intestinal obstruction the diagnosis must be made before the condition has progressed to such a degree that an examination is of much value, if the patient is to be given the best chance for recovery.

The diagnosis of mechanical ileus is usually not so difficult, if it is the only condition that must be considered by the surgeon. The history of intermittent colicky abdominal pain is indicative of obstruction to a hollow viscus. If in addition there is frequent vomiting, obstipation, shock and vigorous intestinal peristalsis as shown by auscultation, the diagnosis is almost certain. The causative factor should be sought for and if discovered by careful search the diagnosis is established. The cause may be (1) adhesions following a previous operation; (2) hernia, complete or incomplete; (3) adhesion in old pelvic pathology; (4) malignancy; (5) intussusception; (6) Meckel's diverticulum; (7) volvulus, etc. The cause cannot always be proven before operation, but usually can be strongly suspected.

In children intussusception is the most frequent cause of obstruction. Its onset is of course characteristic. The patient, usually a male, is seized with a violent abdominal pain, followed by tenesmus and straining at stool with usually some bloody bowel evacuations. The intussusception usually occurs at the ileocecal valve. If relief is not effected, obstructive symptoms soon supervene.

When no other cause can be strongly suspected, Meckel's diverticulum and its possibilities should be recognized. This is a remnant of the vitelline duct and is present in some form in approximately two per cent of patients. It arises from the mesenteric border of the ileum approximately two feet from the cecum. It may connect to the umbilicus, being all or only in part a hollow gut. Usually, however, it is an appendage similar to the appendix and may have a fibrous cord at its tip which may attach to any viscus in the abdomen, usually the mesentery. Around this may be thrown a loop of bowel with resulting obstruction. This, in my experience, has been the most frequent cause of an obstruction when the exact causative factor could not be suspected.

Internal herniation into various unusual pockets may occur but it is rare.

Volvulus most commonly occurs of the sigmoid in old people and is not infrequent. The characteristic features are that very little, if any, enema can be given, obstipation is complete and vomiting of the projective type is missing or almost absent, inasmuch as the obstruction is low.

The most difficulty arises when there is an attempt to differentiate mechanical from adynamic.

ileus. Kidney colic, gallstone colic and similar pathology often have very much the same symptoms as an obstruction and have an associated temporary paralysis of the intestinal canal. In this situation the stethoscope is of invaluable aid, along with the symptoms and laboratory findings.

The diagnosis of the nature of an ileus developing post-operatively is at times a diagnostic problem requiring all the skill and mature judgment of an experienced surgeon. And, unfortunately, to every surgeon doing much work occasionally there comes the experience of having to deal with a post-operative obstruction developing seven to twelve days after a carefully executed and properly instituted abdominal operation. I know of nothing more disconcerting and more distressing to the surgeon and the patient than this complication. When a patient has successfully gone through the hazards of a major surgical procedure, has passed through the stormy succeeding days, withstood the various lethal factors and has just begun to experience the exhilarations and mental comfort of having successfully endured the operation that the benefit promised for the operation might ensue, then to be called upon again to submit to another and sometimes even more formidable surgical procedure because of a complication, requires of that patient unmeasurable courage, fortitude and faith in the profession to rally the body forces for the second fight.

For these very reasons post-operative obstructions are usually operated too late. In dealing with this problem the surgeon must utilize every diagnostic agent at his command to establish a diagnosis, and when it is made he must promptly and unflinchingly carry out the duty of relieving that obstruction. One must reoperate early if an obstruction is present. However, secondary operations on patients with marked distention are most serious procedures and must be undertaken only after the most mature deliberation.

While the patient in whom an obstruction is suspected is being observed, the patient must be given nothing by mouth, especially no cathartics and should be given no such drugs as pituitrin. The bowels may be coaxed to move with enemata and hot moist packs may be used to the abdomen. Nothing can be gained by trying to drive intestinal contents past a kink. Vigorous peristalsis usually accentuates an obstruction if it is not already complete and may be the cause of perforation.

A valuable diagnostic procedure is a flat x-ray picture of the abdomen taken without the use of barium or any other contrast media. Unfortunately this procedure is used too infrequently here although in European clinics it is a popular procedure. In acute small bowel obstruction the collection of gas in the distended segment is shown. Two types of bowel outline may be found: (1) A "herring bone" appearance due to the gas causing the folds of Kerkring to stand out by contrast, giving a feathery, slashed appearance to the intestinal

loops; (2) a ladder arrangement of the bowel coils, when the loops lie parallel. The latter picture is pathognomonic while the first is very suggestive. Contrast media may be used by enema when the suspected obstruction is in the large bowel. X-ray is not only an aid in diagnosis of the condition, but may also give a suggestion as to the site of the obstruction.

Lumbar anesthesia as a diagnostic aid to differentiate between mechanical and adynamic ileus was suggested as early as 1922 by Wagner. As a rule adynamic ileus is relieved by spinal anesthesia while mechanical ileus is not. Duval has shown, however, by a series of cases that such anesthesia is not reliable in differential diagnosis, sixteen per cent of his cases of mechanical ileus had intestinal evacuations after its use, from the bowel below the obstruction. In our experience adynamic ileus has not always been relieved by its use, and I have felt that it is of small value as a diagnostic aid, although it may be tried.

Laboratory determinations showing a lowered blood chloride and increased carbon dioxide combining power are of prognostic significance but are not of value in making an early diagnosis. It is useful in determining how much chlorides should be given in the treatment to keep up the chloride balance. White blood count is usually considerably elevated, but for that reason is not useful in a differential diagnosis from peritonitis and acute inflammation.

In spite of advances in surgical diagnosis and operative skill, the mortality rate in bowel obstruction is still exceptionally high. It has been lowered very little in spite of all the studies that have been devoted to the subject.

The prognosis depends on several factors. Of most importance is the time of operation, the earlier the operation the better the prognosis. As one surgeon stated, "The longer a patient with intestinal obstruction lives before operation, the sooner he dies afterward." In a series of 343 cases of small bowel obstruction reported by Miller, the mortality rate when the patient was subjected to operation within 12 hours of the onset of the symptoms was 29.4 per cent; within 24 hours, 52.9 per cent; within 36 hours, 50 per cent; within 48 hours, 59.6 per cent; within 72 hours, 63.4 per cent; within 96 hours, 72.8 per cent, and over 96 hours, 84 per cent.

The prognosis varies with the site of the obstruction, the nearer the obstruction to the duodenum the more pronounced the toxemia and the more fatal is delay. Prognosis is worse also in those cases with badly gangrenous intestinal loops and in those cases in which there is an associated peritonitis or a perforation.

Preliminary treatment while an attempt is being made to establish the diagnosis also affects the prognosis. Those cases that have had food by mouth, cathartics and pituitrin are much more apt to have a perforation, and prognosis is not as good.



## TREATMENT

Of greatest importance is early operative relief of the obstruction. If a mechanical obstruction can be relieved before distention has progressed to such a degree that interference to the blood supply has occurred, the mortality should be practically nil. In cases of dehydration, fluids should be given by hypodermoclysis and intravenously, and because of the hypochloremia chlorides in the form of sodium chloride should be given. These should be given in the preliminary management and must be continued throughout the management of the case in sufficient quantity to equalize the loss of fluids and chlorides.

The stomach should be lavaged if distended. I have personally not practiced washing the stomach if the patient was able to empty it well by vomiting inasmuch as a gastric lavage is an ordeal for most patients. When the patient cannot empty the stomach, I prefer to insert a Rehfus tube and leave it in place and keep the stomach sucked empty with a syringe if possible. At times gastric lavage by a stomach tube is essential.

Spinal or local anesthesia is the anesthesia of choice because of the danger of vomiting and possible aspiration while the patient is anesthetized by general inhalation anesthesia. Furthermore, the spinal anesthesia may be of diagnostic aid and therapeutic value.

The operative procedure varies with the lesion encountered. It is imperative that the obstruction be relieved in some manner. When possible the obstruction should be relieved. Frequently, however, no attempt should be made to extirpate the obstructing lesion. There is probably no condition which requires more gentleness than acute intestinal obstruction. Bunnell states, "Every manipulation is a shove nearer the grave." In such a case the operative procedure of simple drainage of the intestine above the obstruction is the method of choice, leaving the relief of the obstruction for a second operation.

Enterostomy has been advocated and used for years but its popular and widespread application has not been developed until recently. Many men now do a high Witzel jejunostomy whenever a bowel obstruction is suspected following appendiceal abscesses and other abdominal operations. They do this to drain the upper intestine and relieve the ileus. Many excellent results and many lives have been saved by the judicious use of this procedure when the patient is too sick for any further surgery. The technique is simple; under local anesthesia, a high left rectus incision 1½ inches long is made, a loop of jejunum is pulled out, a size 14 catheter fastened in the jejunum by the Witzel technique, it is dropped back into the abdomen, the tube pulled through the omentum and the wound closed. This tube is used for draining the intestine and reintroducing salt solution. It is of great value except where there is extensive adynamic ileus with paralysis of the bowel. Then

it only drains the adjacent segment. It should always be done while peristaltic waves are still present.

Enterostomy done at the right time in the right way is the most effective means we have at the present time to relieve and prevent intestinal overdistention. It should be used judiciously but there should be no hesitation when its use is indicated. I have used this procedure frequently and have felt that it has saved lives. It relieves distention and if the toxic theory is correct, it removes toxic products from the intestinal tract. However, if the loss of high intestinal secretions is the cause of profound shock, the drainage is theoretically detrimental, except that it relieves distention. Furthermore, if there is a leak around the enterostomy, or the valve-like Witzel closure is not effective when the tube is withdrawn, a high intestinal fistula develops that is difficult to manage. The advocates of this method say that such a condition will not occur; however, it has occurred to myself and to other men who I know carried out the procedure well. The higher an intestinal fistula the more active the intestinal digestive juices, and for that reason the wound becomes digested, the skin excoriated and closure is delayed. It usually closes finally but after considerable effort on the part of the surgeon and discomfort to the patient. I, therefore, prefer to make the enterostomy as low down as possible in the small bowel, as near the obstruction as possible. When the procedure is carried out under local anesthesia in a sick patient with a distended abdomen, no careful search dare be made, but by choosing the site of the incision a low distended loop can usually be secured. Witzel enterostomy at this point has the advantage of drainage of toxic products without the disadvantage of removing intestinal secretions before some of them have been reabsorbed and if a fistula develops it is easier to handle the lower down it is in the intestinal tract.

In my judgment the chief value of enterostomy is relief of a mechanical distention. It is of great value in the distention occurring in ruptured appendices. In this situation there is in reality an obstruction by inflammation and a localized paralysis of the segment of the bowel in the lower end of the ileum. This affects a mechanical obstruction of the segments above. A Witzel enterostomy can be of great value and will do no harm if the bowel higher up is still active. This can be determined by auscultation. If intestinal sounds are actively present, the procedure is indicated in cases of distention, obstipation and vomiting and can do little harm. It of course will avail nothing in cases of general peritonitis with extreme distention and bowel paralysis.

After the obstruction has been relieved by enterostomy the next problem is how to deal with the obstruction. Quite frequently the obstruction may correct itself. This is particularly true in cases in which the obstruction is due to inflammatory ad-

hesions in the region of the pelvic inflammation or an appendiceal abscess. In this situation the Witzel tube may be removed and the enterostomy will close if the normal passageway remains open.

If the obstruction remains it becomes necessary when the patient's condition permits to go in and relieve it and do what is necessary for permanent relief. If a resection is necessary the procedure may be carried out according to the judgment of the surgeon in each individual case. If a volvulus is present it must be relieved. If cancer is present it may be resected or a short-circuiting operation performed if the tumor is inoperable in the judgment of the surgeon.

The use of enterostomy when the obstruction is relieved at the first operation is at times problematic. In those cases in which the intestines are greatly distended it is a wise procedure to do an enterostomy above the obstruction and thus relieve the mechanical distention. Otherwise, because of this, the patient may succumb to an ileus even though the obstruction has been relieved. In border line cases it may be advisable to drain the intestinal contents through this small tube and immediately reclose the wound. The only advantage of this is that the patient will have a clean wound and no drainage in case he recovers. It is probably not as effective and safe as an enterostomy. All of these individual problems must be decided at the time of operation and depend upon many factors.

There are some rules that must be remembered in dealing with these cases. One should never do a resection and attempt an anastomosis in the presence of acute obstruction. The danger of tearing and leaking of the distended bowel is so great that the resulting mortality is extremely high. Occasionally the loop of bowel may be brought outside and a gun barrel anastomosis can safely be done by using a clamp to destroy the septum gradually, several days after the preliminary operation and incision of the gangrenous bowel. Thus a secondary operation can be prevented.

It is well to remember that a fistula will almost always close if the normal passageway is open. It is best to keep this open with enemata and avoid cathartics and heavy food until the fistula closes. Rarely does closure fail to take place unless there is a local tuberculosis, syphilis, or cancer of the bowel.

I have attempted briefly to state some of the facts concerning acute bowel obstruction and have not been able to cover the whole subject. In large bowel obstruction the picture is quite different unless there is a volvulus or strangulation. In this situation symptoms are quite acute but in other obstructions and especially those occurring in the region of the sigmoid and rectum, obstipation is the first symptom, distention is next to occur and is usually extreme, while vomiting occurs late in the illness. The process is slower in developing and the patient may even survive for two weeks

or more without operative relief. The patients are best treated by caecostomy under local anesthesia and later exploration and attack of the obstructing factor, which is usually a neoplasm.

In conclusion, I wish to emphasize the following points:

1. Although much experimentation has been carried out, there is no general agreement as to what causes all of the profound symptoms and rapid death of these patients. Many of the symptoms are due to dehydration, chloremia and alkalosis. Whether there are definite toxic products or whether the loss of necessary intestinal secretions is the last factor producing the symptoms of shock, is not as yet definitely settled.

2. Acute bowel obstruction is a definite emergency and a favorable prognosis is possible only with early operation.

3. Treatment consists of plenty of fluids and sodium chloride intravenously and by hypodermoclysis, both before and after surgery.

4. Surgery consists of relief of the obstruction either by actually correcting the obstructive factor or by enterostomy. The surgeon should always err on the safe side and do as little as possible in the more desperate cases. These patients stand surgery poorly. Spinal or local anesthesia are the anesthetics of choice.

5. In spite of considerable scientific study the mortality rate is extremely high. More effort to obtain early diagnosis and prompt surgical relief remains the chief hope in reducing the mortality.

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## CLINICAL APPLICATION OF ROENTGENOLOGY OF THE GALL-BLADDER\*

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How many of our patients have chronic gall bladder disease—with or without clinical manifestations? If statistics are worth anything, more than half of the adults over 30 years of age have abnormal gall bladders and one out of five has gallstones. In 1,600 autopsies, 27 per cent showed gallstones and 63 per cent showed pathology of the gall bladder.<sup>1</sup> I do not believe that we are so much interested in the mere presence of pathology and stones as we are in determining in which patients these abnormalities are actually responsible for the clinical symptoms that cause them to seek medical advice, especially those vague complaints so confusing to the doctor. My part in this symposium is to discuss with you the clinical application of the roentgenologic examination and how it can help you solve this perplexing problem.

Soon after the discovery of the roentgen ray, exhaustive studies were made of biliary concretions and it was demonstrated that the stone shadows

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varied in density according to their calcium content. Gallstones in the living subject were demonstrated first in 1898.<sup>2</sup> Beck,<sup>3</sup> in 1909, came to the conclusion that the absence of demonstrable calculi did not negate the diagnosis of cholelithiasis, and that when calcification was present the outline of the gall bladder was also shown. These observations were probably the beginning, in America, of an intensive interest in the roentgenological aspects of gall bladder diagnosis.

The years 1910 to 1924 brought out numerous publications on gall bladder diagnosis by the indirect as well as the direct method. Peri-cholecystic adhesions and duodenal cap deformities as the result of gall bladder pathology were reported.

Cole,<sup>4</sup> in 1913, emphasized peri-cholecystic adhesions as a more reliable indication for surgical intervention because such pathology resulted from visceral infection, whereas an uncomplicated stone might be harmless. Early in this period the differential diagnosis between gallstones and right renal calculi, as well as calcareous deposits in the costal cartilages, tuberculous kidney or mesenteric lymph nodes was clearly established.

Both Cole and George,<sup>5</sup> in 1915, urged the need for extreme care in the technic of gall bladder examinations and interpretation of findings if erroneous diagnoses and unnecessary surgery were to be avoided.

There was much written on the value of being able to demonstrate stones and a faint shadow of the gall bladder, but this fades into insignificance when compared to present day cholecystography. The indirect method with the bismuth meal did not have the clinical accuracy of the present day barium meal studies and the gall bladder filled with the dye.

Cholecystography as it is now known was introduced in 1924 through the work of Graham<sup>6</sup> and his associates in St. Louis. Their work developed the fact that gall bladder visualization could be produced by utilizing the function of excretion. This remarkable discovery was the result of exhaustive research with opaque chemical compounds which would be excreted in the bile by the liver. Three sodium salts of halogenated phenolphthalein were clinically acceptable. The first iodine preparations were too toxic for practical use. The bromine preparations, although less toxic, did not produce as dense a shadow. Subsequent refinement of the iodine compound resulted in less toxicity and produced a better shadow with a much smaller dose. Two of the facts pointed out by Mann<sup>7</sup> in support of a definite physiological significance of the gall bladder are: First, the gall bladder concentrates the bile that enters it, and second, when properly stimulated it expels the bile by contraction of its intrinsic musculature. These have made cholecystography an important adjunct in the clinical diagnosis of gall bladder pathology. There is the combined service of a vesicular functional test and objective evidence of the presence or absence

of gallstones and the size, contour and position of the organ.

The research upon the effect of fats and certain drugs in the emptying of the gall bladder enabled the workers with the dye to establish a routine cholecystographic procedure.

Throughout this country and abroad there has been an irreconcilable division of opinion as to the most efficient method of giving sodium-tetra-iodo-phenolphthalein. Graham<sup>6</sup> and his workers have consistently endorsed the intravenous method, and agreeing with them on this method have been Case, Waters, and many others. Among its advantages might be mentioned the elimination of all extraneous factors affecting the absorbability of the dye, the certainty and intensity of the shadows obtained, and the brevity of the examination time.

Among the prominent physicians in favor of the oral method are Kirklin, Menees and Stewart. Kirklin,<sup>8</sup> with unlimited opportunity to use and study each method, has persistently employed the oral method, and is convinced that the oral method, when properly executed, is as accurate as the intravenous route. After all, careless methods, poor technique, and insufficient experience in interpreting findings have led to most of the errors attributed to any method of roentgen diagnosis. As the result of the early enthusiasm for cholecystography, the advantages of the indirect method of gall bladder study lost cast and were not utilized for a time. In the past two years there has been increasing interest in a more detailed and thorough study of the borderline case by the utilization of all methods; i. e., the use of the contrast meal in the upper alimentary canal in combination with cholecystography.

Fried<sup>9</sup> and Rossi<sup>10</sup> have recently reported their results by using the combined examination. The latter's findings in the atonic gall bladder and in the strawberry gall bladder are especially helpful.

Davidson<sup>11</sup> and his assistants developed a combination of the intravenous and oral technique which they claim is entirely safe for office procedure; and its accuracy comparable to that of the intravenous method. They give about one-half of the average dose in the vein and one-half by mouth and follow the procedure ordinarily used in the oral method.

Kretchmar<sup>12</sup> has recently added another brilliant chapter to the study of the biliary tract. He reported six cases where lipiodol was injected into biliary surgical drainage tubes to determine the patency of the choledochus. He claims this is of great value in demonstrating whether or not success has been attained in choledocholithotomy, and that such studies will constitute the earliest indication for further surgery in cholecystotomy for acute lesions of the gall bladder.

A method of procedure which will be 100 per cent satisfactory in all cases, even though it combines all of the clinical acumen of the internist, surgeon and roentgenologist, has not yet been described. There are patients on whom a carefully

taken history and a thorough physical examination will leave little doubt as to the presence of well advanced cholecystic disease with or without calculi. In this type of case there are various reasons why cholecystography might not be indicated. With deep jaundice, passive congestion of the liver due to cardiac failure, or with a history of a previous cholecystostomy the dye examination would be negative. Primary films might show calcified stones. In acute uncomplicated empyema of the gall bladder the patient might be too ill and the indications for emergency surgery too great.

When the clinical examination leaves doubt as to the diagnosis or the method of treatment, roentgen consultation should be employed—a simplified and economic procedure adopted. Primary films should always be made. Cholecystography by the oral method is safely carried out as an office procedure. If the test is properly done and there is definite evidence of stones, according to Kirklin<sup>8</sup> the roentgen diagnosis will be 99.6 per cent correct, whether the gall bladder shows normal function, poor function or is non-functioning. If it does not function and there are no stones it will be 97.1 per cent correct. If it is a poorly functioning gall bladder and there is no evidence of stones, his figure, which is based on diagnoses confirmed at operation, is 94.8 per cent, while in the cases that show a well functioning gall bladder, the diagnosis was correct in only 89.5 per cent.

In a large series of cases of suspected gall bladder pathology there would be a certain number where further roentgenologic study would be indicated. The next most important step is the examination of the upper alimentary tract with a contrast meal for extra-cholecystic disease or indirect evidence of intrinsic cholecystic pathology.

A combination of cholecystography and an opaque fatty meal, with fluoroscopic study of the dye filled gall bladder and the barium filled stomach and duodenum is very advantageous in selected cases.

The patient whose gall bladder contains cholesterol stones without impairment of functional activity usually gives a vague and unsatisfactory history, and the physical examination is very often unconvincing. If a good concentration of the dye is obtained, the stones will be demonstrated in almost 100 per cent of the cases, but if there is a faint shadow it is difficult to differentiate between the negative shadows of the cholesterol stones and the mottled appearance of the superimposed bowel. It is in this type of case that valuable information may be obtained by repeating the cholecystography, using the intravenous method.

Cholecystographic findings in the strawberry gall bladder are variable and inconstant. Some present a fairly normal response to the dye, while others present an abnormal filling or emptying and show a diffuse mottling which is apt to be confused with the negative shadows of cholesterol stones.

The patient who complains of typical persistent upper right quadrant pain which is referred to the

back and right shoulder, frequently has a large gall bladder. In such a case, if the gall bladder visualization after a fatty meal remains the same or is increased in size and density, the patient nearly always complains of increased pain. This finding is most marked in cases of hydrops with or without stones, or with a functioning gall bladder containing many stones.

Cholecystographic studies<sup>19</sup> in the late months of pregnancy are entirely feasible, but if the gall bladder fails to visualize it is not a reliable indication of gall bladder pathology.

The indications for roentgenological consultation cannot all be listed. It has been reported that gall bladder disease is twice as frequent as peptic ulcer and gastric cancer combined and is the most common organic cause of so-called dyspepsia. In doing complete roentgen studies, routinely, non-functioning gall bladders and stones are often found in patients with no history or clinical findings suggesting cholecystic disease. If your patient with typical ulcer symptoms does not improve or become more comfortable on a Sippy diet, gall bladder pathology must be ruled out. With the high percentage of accuracy in carefully done roentgen-ray studies there is little excuse for prolonged medical treatment of patients with cholecystitis, misdiagnosed as ulcer or "so-called" colitis; or for surgical intervention for a pathological gall bladder, only to find a perfectly normal organ.

#### *Other indications are:*

- (1) A complaint of gas and persistent indigestion, bloating, soreness, or attacks of pain in the patient past the third decade, especially women.
- (2) A definite history of previous jaundice.
- (3) Repeated attacks of epigastric colic.
- (4) Constant upper right quadrant pain which is referred to back or right shoulder.

*There are certain definite contra-indications for the oral administration of the dye.* In these cases the intravenous method may be used and accurate data not otherwise obtainable will result:

- (1) Severe cases of nausea and vomiting.
- (2) Obstruction at the pyloric outlet of the stomach.
- (3) Atonic, dilated stomach which does not empty in normal time.
- (4) Bowel obstruction associated with gastric disturbance.

*Cholecystography by either method will produce negative results when there is:*

- (1) Severe acute hepatic disease.
- (2) Obstructive biliary tract jaundice.
- (3) Marked impairment of hepatic function due to any cause, cancer, cirrhosis, etc.
- (4) Hepatic congestion due to cardiac failure.

If digitalis therapy results in improved cardiac condition, the dye examination may be afterwards satisfactory.



*What part does the roentgenological examination play in deciding the method of treatment?*

(1) If cholecystography shows a normal response to the dye and there are no stone shadows and an average sized viscus, certainly there would be no particular hazard in attempting the relief of the clinical gall bladder symptoms by medical management.

(2) An expectant program would be in order in an elderly patient with clinically silent stones, with or without good gall bladder function.

(3) Surgical treatment should be considered when the clinical examination is positive and the roentgenological examination shows:

1. Either calcified or cholesterol stones.
2. An unusually large gall bladder.
3. A non-functioning gall bladder.

In conclusion, the roentgen-ray studies must be evaluated with a complete and accurate knowledge of all the technical factors used in producing the films, and this must be correlated with a carefully taken history and a thorough physical examination. If the roentgenologist's report checks with the clinical examination and is indicative of gall bladder pathology, you will seldom be wrong in treating the patient for cholelithiasis. From an economic standpoint we must not lose sight of the fact that we are in direct competition in the practice of medicine with numerous cults and pseudo-practitioners who enjoy the title "doctor." If we are to appear to have a superiority of skill in the eyes of the public, it will come from the accuracy of our work.

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#### THE UNDERPRIVILEGED CHILD

At the request of one of our readers, we are reprinting the following article from the *Monthly Bulletin of the Indiana State Board of Health* for April, 1932.

It's easy to think of the underprivileged child as one that lives down by the railroad tracks; but not so easy to conceive of him as living on the boulevard. As a matter of fact a great many undernourished and mistreated children do actually live in beautiful homes with evidences of wealth on every side. It is not impossible that your own child is underprivileged in the eyes of the family physician. Suppose you grade your child on the following twenty-five counts—four points on each:

1. Does your child have a good, carefully prepared breakfast?
2. Does he eat vegetables, fruit, milk and real food at meal times?
3. Does he get as much sleep as he needs?
4. Does he have regular hours for sleeping and eating?
5. Does he have the attention of a dentist as needed?
6. Are his tonsils and adenoids either healthy or out?
7. Are his eyes either normal or properly corrected with glasses?
8. Has he been immunized against diphtheria, and vaccinated against smallpox?
9. Has he been taught the truth regarding sex as he has naturally asked questions concerning it?
10. Has he been put to bed and carefully protected when he has acute infections?
11. Has he been taught habits of cleanliness and decency?
12. Has he good manners?
13. Has he a mother that requires him to put his toys away when he has finished playing with them?
14. Has he been inspired with a desire for knowledge and attainment?
15. Has he two parents who love each other to make a home for him?
16. Has he parents who are good citizens?
17. Has he a father who romps with him and a mother who reads him stories?
18. Has he brothers or sisters to play with him? (Or possibly a dog as a poor substitute?)
19. Does he have a good place to play indoors and another out of doors?
20. Has he an opportunity to get into the woods and fields?
21. Has he a regular task to do?
22. Has he been taught to speak his mother tongue with grace and accuracy?
23. Has he been allowed to develop a personality and to think his own thoughts?
24. Has he been taught ideals of reverence toward religion, beauty, truth, industry, and worth?
25. Does he have intelligent parental control?

If he hasn't these things, he has missed a lot and must be considered to that extent an underprivileged child.

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DEVOTED TO THE INTERESTS OF THE MEDICAL  
PROFESSION OF INDIANA

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JULY, 1934

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## EDITORIALS

### THE GENERAL MAN

En route to Cleveland a few days ago we overheard a conversation among a group of men whom we later deemed to be medical men from some western state; they were not specialists, apparently, but were of the garden variety of medical practitioners. They were discussing various economic problems as they affect the medical profession.

In a short time the discussion drifted into the subject of "the general man." The gist of the conversation was to the effect that the general practitioner had for years gotten the worst of it; that the specialist extracted a large fee from the patient, while he had to be content with little for his work. This group had much to say as to the plight of what they called "the little fellow."

A few hours later, in a hotel corridor, we heard another group discussing the same subject; this group was composed of some half dozen Chicago specialists. They, too, were of the opinion that something must be done for "the little fellow." During our short stay in Cleveland we heard this subject, in one form or another, discussed at least a dozen times. The chief surgeon of one of our great transportation systems remarked that something had to be done for the little fellow—the general man; that it was his opinion that the general man was "coming back"; that in the near future the general practitioner, the family doctor if you please, was coming into his very own, and that for a time at least he would be the big factor in medical organization.

We have long contended that too much attention is given to the specialist in our meetings, both local and national; by far the greater part of our pro-

grams are given over to specialists or to laboratory men. The general man is not so much interested in a discussion of some highly technical problem of research work as he is in a conference in which actual bedside experiences are exchanged.

Our memory goes back for more than thirty years when we had what was known as the Kankakee Valley Medical Society; we recall the first meeting that we attended. Most of the members were men with many years of experience, and few of them had any laboratory training; yet their discussions of medical problems were most interesting. Typhoid fever, then a most common disease, came in for an annual overhauling; these old-timers were wont to describe their methods of treatment, some of which brought on a discussion such as is rarely heard in modern times. We recall a time when a former president of our state association presented a paper on "Blood Pressure." Immediately after his conclusion an old-timer arose and berated the doctor for having taken up a half hour of valuable time to present such a ——— fool subject!

We need our laboratories; we need our research departments; we need our specialists. But, above all, we need the old-fashioned general man, the man who sees the cases first and the man who is the bulwark of the profession.

One of the heads of a famous clinic told a story some years ago at a meeting in Philadelphia: A patient had entered the clinic, and after some two weeks of observation a diagnosis had not been made. Then the patient died. The clinic head, desirous of knowing just what had been going on, went to the autopsy room just before leaving for Philadelphia. He inquired as to the findings and was advised that they were nil. He remarked that something must have been wrong and asked, "What was the cause of death?" The pathologist answered, "The man died from too many examinations; what he needed was a doctor!" We are for the general man, just one hundred per cent, and shall watch with great interest the result of the predictions that he is fast coming into his own.

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### CINCHOPHEN

It is a curious fact that a drug should have a fairly well established reputation for usefulness over a period of fifteen years before its toxicity is recognized, yet such is the case with cinchophen. It appeared first under the name atophan in 1908, and in 1922, 1923, and 1924 there first appeared descriptions of serious toxic effects from the drug. Since that time more than one hundred cases of cinchophen poisoning have been reported, with a mortality of fifty per cent. Such a percentage commands attention. Cinchoninic acid has gained wide popularity as an analgesic in all rheumatoid disorders. Its action is quite similar to that of the salicylates and it has been a source of great



comfort to sufferers from neuralgia, arthralgia and the like. So popular has it become that very many names have been coined for the cinchoninic acid derivatives such as atophan, neo-cinchophen, mono-iodo-cinchophen, oxyliodide and many others. Too few of the manufacturers tell of their product's toxicity. This is unfortunate for the physician to whom the good results of the drug have been shown when he has no way of knowing about the bad effects. Pharmaceutical houses in general may well be rebuked for telling the truth, but not the whole of it. The truth about cinchophen is that it is a drug with analgesic properties useful in rheumatoid conditions. The whole truth includes quite additional and important facts regarding tolerance. Some persons may take large doses over long periods without apparent harm, but other persons may take a few small doses and die fairly promptly. The pathologic change is acute yellow atrophy of the liver, a condition known by every physician as a very dangerous one. The liver damage may appear early or late or not at all in the course of treatment, but when it does appear it comes with such disabling effect that emphasis may well be given to statements of Dr. Howard Carroll and Dr. Charles A. Elliott, of Chicago, that "it seems unwise to administer cinchophen as a therapeutic agent under any circumstances, especially since many harmless and equally effective analgesic drugs are readily available for use. The frequency and abandon with which cinchophen, a dangerous drug, is employed in the manufacture of proprietary and other preparations should be a matter of great concern to the medical profession as it is a menace to the public."

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#### THE RAPE OF THE TONSIL

Dr. Frank Billings made a memorable contribution to medicine when he published his now famous pronouncements on "Focal Infection." Probably Dr. Billings little dreamed that his preachments would result in what has since been termed "an orgy of tonsil surgery." The campaign against this bit of human tissue became nation-wide and "t. and a." operations became the order of the day. These operations were done in and out of hospitals; in the office and in the home; everybody was doing them, regardless of training. Of course, this resulted in the unnecessary destruction of human tissue, including more or less injury to other faucial structures.

A few years later the pendulum swung backward, at least to some extent; no longer did the rank and file of the profession blame all human ills on the tonsils; it was deemed that, after all, this little organ might have some purpose other than to be surgically removed. But the tonsil snipper would not be denied; it was an easy operation and it was a financial success, and he continued his campaign.

A staunch ally was found in another profession—that of nursing. Those engaged in public health, welfare and school work soon became "expert" in the diagnosing of tonsil infection; in fact, they became so skilled that they could foresee danger wherever they saw tonsils; they bombarded parents with notices to have the offending tissue removed forthwith; some even advised physicians that the tonsils must be removed. And many times the advice of these nurses was followed.

Not content with such a slow procedure, our health workers organized "tonsil clinics"; they held "tonsil days," when kiddies were herded into a common point like so many sheep, there to be participants in a wholesale "tonsil party." In Indiana, today, we have these mass production affairs, so we are advised, and it is safe to say that many children are operated on solely on the diagnosis of the nurse in charge of that particular school or organization.

We know of many instances in which the surgeon operates without ever having seen the patient before he was anesthetized; the nurse had made the indictment, the surgeon carried out the execution.

Some of these "tonsil clinics" were financially productive to the operating surgeon; in some instances the services were gratis; in many cases a reduced rate was given in view of the wholesale nature of things. At any rate, it is our opinion that many tonsils were needlessly sacrificed; many operations were done without due investigation by the operator. This has resulted and is still resulting in tonsil operations being very much discredited by the laity; too often we hear it said that when a doctor once discovers a patient is still carrying his tonsils, it is just too bad for those bits of tissue!

There are, of course, many cases in which tonsil infection is the definite focus of infection; tonsil surgery is often indicated, but it is our contention that far too many of these cases go to operation. However, we are very pleased to note that the list of conservatives is growing; we note an increasing number of writers condemning the slaughter of the tonsil.

We continue to prate about socialized medicine and state medicine; yet we sit supinely and accept diagnoses from our welfare and school nurses; we operate because they say we should operate (plus the financial consideration). Let's be fair about it; let's give the same care and consideration in making a surgical decision in the case of the lowly tonsil as we do when we have an abdominal affair.

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#### GUINEA-PIG-O-MANIA

Red-shirted hordes are massing ill-humored in the open squares of Leningrad and Moscow; black-shirted hosts are marching heads-up in Rome; brown-shirted battalions are goose-stepping Heil

Hitler in Berlin; while elsewhere in Europe blue-shirted and gray-shirted and silver-shirted, human guinea-pigs, all pink at heart, are parading, tramp, tramp, tramp, hither and yon, company by company and platoon by platoon, in maniacal-restive revolt. Think. What does it portend? If and when the effervescing bubbles blow the lid off the steam-seething caldron, can we escape the resulting scalds and scars?

Beware America! Beware lest, having bought and paid for those very same shirts now being worn by jittery European nationals, through soft-hearted debt-forgiveness and debt-non-collection, through benevolent battleship-sinking conferences, and through day-dreaming, trade-losing illusionary concessions and treaties, beware lest we guinea-pigs Americanae be not likewise regimented in double-files and columns of fours and squads of eight without any shirts at all. Barrel-stave nudity indeed threatens.

In many investigative laboratories throughout our land, problem-budding Ph. D.'s and thought-blossoming M. D.'s continually are scrutinizing the atom and pursuing the molecule in their endeavor to lay nature's most intimate secrets bare and naked before us, all for the betterment of mankind. This is as it should be. It is by such experiments that many notable advances have been attempted and made in scientifically progressive medicine. This intensive inquisition by the prying eye of biochemistry must continue, day by day.

However, public opinion is beginning to question: Is man a guinea-pig? Subservient to experimentation? No. Man possesses a potentially abstract-thinking brain, a brain capable of rational reasoning, and the age-yellow, parchment pages of socioeconomic history extending to the far horizons of antiquity lay open before us. He who runs may read. He who studies may interpret, for the lesson is plain. Those who float half-submerged like idle flotsam on even the outer edge of the giddy whirlpool, inevitably are sucked into the destructively swirling vortex.

Again, does man readily lend or adapt himself to social and civic reformation or regimentation? Again, no. Man is essentially an individualist. Both training and experience have made of him a tight-bound bundle of habits and inhibitions. Descendant from prehensile-type ancestors, when the family-herd ceased to roam and abandoned its life in the trees, man became primarily non-communistic. He developed an ego. True, he may for a time and in part suppress and subject his own personal interest for the larger good to the greater many, but eventually, when over-stressed, he rebels. America once staged a Tea-Party in Boston. Ever since then, prohibitions and edicts and decrees have been distasteful to us and remain bitter in the mouth today to our one hundred and thirty million sovereign citizens. The foreign-bred philosophy of defeatism courses not in our veins. Bureaucracy, we believe, leads to naught but abject

slavery, and America boasts no kneeling heritage. We are free-born.

The above hypotheses being correct, therein resides a basic, medico-political precept for organized medicine to follow. Let us inquiringly search out the legislative mesquite and the administrative underbrush and unmistakably brand with black-ball votes this coming fall those mavericks whom we have reason to suspect of long-haired theories and pop-eyed reforms as regards goose-stepping the medical profession. Politely, yet firmly insistent, let us present the wool-gatherers with one-way tickets to their farms and forges and ribbon-counters and trash-littered desks and dust-covered law books. Otherwise, in their guinea-pig-o-mania, they will march our ideals and idealisms, one by one, single file, up that long, last hill for crucifixion. Once these have been nailed to the cross, then, indeed, will it be too late for us to seek the wailing-wall of remorse.

The legislative mind, quite often egoistically intent on self-perpetuation, frequently knows but little and cares still less about scientific medicine, because fiat-government concerns itself largely with hurrah nostrums and vote-getting panaceas. The merely gold-washed chains of ward-heeler serfdom await the medical profession if organized medicine slumbers.

No, the picture is not overdrawn, gloomy, drab and weather-beaten though it may seem. If you still think so, if with your head buried in the concealing sand you still are unwilling to face the legislative actualities and potentialities, then heed the warning words of United States Senator Carter Glass, of Virginia, as of April 27, 1933.

A somewhat small and homely man, venerable and bent with age, sick and limping, nevertheless his beseeching voice pealed clearly in the Senate chamber and echoed loudly in the gallery as he cried out in vain against the guinea-pig experiments then about to be enacted. He said:

"Bacon, the wisest philosopher since Christ, the author of the inductive system from which we have drawn all of our inventions, valued experience. Edmund Burke, the greatest rhetorician of all times, was logician enough to magnify experience. Patrick Henry, the greatest advocate of human liberty, said that his feet were lighted by the lamp of experience. Yet, here today, we are flying right in the face of experience, rejecting it all."

When normal processes of thought, such as our defense-mechanisms or other motive factors, become abnormally intensified, insanely so, we call the resulting obsession, mania. Hence guinea-pig-o-mania might be defined as an exaggerated and unrestrained impulse on the part of those in presumptive authority to impose undue experimentation upon a free and untrampled people, or upon an industry, or upon a profession. It smacks of the symptom-complex of mob psychology.

The political sap is rising with inevitable and undeniable surge in the now-naked, legislative trees.



Before our very eyes, the job-seeking aspirants are budding and bursting forth with the camouflaging foliage of their secret ambitions and their closely buttoned desires. Invitingly attired, whiskers freshly shaven, faces and necks recently washed, trick-powdered and guile-perfumed they strut with masquerading éclat upon the circus-stage. Smooth-tongued and honey-voiced are their pre-election promises, yet often scatter-brained are their ideas. Therefore, we must study the character and analyze the background of each candidate, disregarding party-labels. Many times do we realize only too late that the platform plank used so blithely to bridge the pathway into office has been cast equally gleefully into the consuming fire of the post-election celebration. Let us choose wisely.

When full-blown, the symptomatology of disease is obvious; to be eradicated, the focus must be attacked early and treated vigorously. A palliative poultice merely will postpone the inevitable. Let us *rincer les yeux* that we may see more clearly, that we may incise sharply through the glamour-tinted exterior in order to dissect widely and to probe deeply for the furtively hiding, abscessing infection of guinea-pig-o-mania.

Surgical drainage is indicated.

## EDITORIAL NOTES

LAKE County seems to be the first to make an open bid for the 1935 session of our state association. That society recently voted to ask the House of Delegates for the honor of acting as hosts next year. They propose to hold the meeting at Gary, with headquarters at the Gary Hotel. Accommodations here are most excellent, and it is possible to carry on all the major activities of the convention under one roof. Members attending the 1928 session will recall with much pleasure the manner in which the Lake County Medical Society carried out the entertainment program.

Annual meeting of committee chairmen will be held at the Indianapolis Athletic Club, Sunday, July eighth, at one o'clock, Central Standard Time.

A RECENT pronouncement of the Board of Regents of the Americal College of Surgeons seems likely to have gotten that group into a bit of hot water. The American Medical Association House of Delegates adopted resolutions on the matter in no uncertain terms and have demanded some action on the part of the board or the college. Just why a little coterie of men should take it upon themselves to pass upon such an important question as health insurance is beyond us; certainly it

is a matter that concerns all practitioners of medicine, and they should have some voice in such an important matter.

THOSE in charge of the scientific exhibit at Cleveland fairly outdid themselves this year; we do not recall having seen such a large exhibit nor one of more interest to the average physician. Indiana doctors may well be proud of the development of this part of the annual sessions of the A. M. A. because of the fact that our own Frank B. Wynn was the father of this movement. 'Way back in 1899 Dr. Wynn went to Columbus, Ohio, to attend an annual meeting; he rented a vacant storeroom and there set up a personal scientific exhibit, and from that small beginning has evolved one of the live features of A. M. A. meetings.

THE Division of Public Health is to be congratulated on its exhibit at the Cleveland session of the A. M. A. It was not a large exhibit, but it was somewhat historical in nature and attracted much attention; we were pleased to note that each time we passed there was an interested group of spectators. The exhibit was designed to show the set-up and method of operation of the Indiana plan. Not the least interesting was a table showing the saving of more than a hundred thousand dollars annually. Drs. Rice and Harvey were in constant attendance and were kept quite busy explaining various features of the Indiana plan.

Too much credit cannot be given the quartet that represents Indiana in the A. M. A. House of Delegates; these men are among the most active in the whole House, and those who have been there for a number of years have reached the point where they make themselves heard. It seems to be an unwritten law that a member of the House should remain silent until he has a considerable attendance record, but our Indiana folk do make themselves known. The Sensenich resolution, to which reference is made in the official report of our delegates elsewhere in THE JOURNAL, remedies a situation that needed treatment. It is but one example of some constructive work done by the Indiana delegation.

ACCORDING to correspondence received by the Indiana State Board of Medical Registration and Examination, the medical dictionaries will have to be revised to accord space for a coinage of new terms by a western drugless practitioner. He writes the Board seeking information as to Indiana licensure; states that while he is a chiropractor he has developed new methods. He terms them under the general name of "cranial adjustments." The gentleman seems to have acquired an unusual list of degrees, having signed himself as Dr. Blank, B. S.,

LL. B., D. C. and N. D. Quite an array, that! He goes on to say that he has coined the following words to be used in describing his latest methods of carrying on: craniopathy, craniopathist and craniopathic. Through these methods he teaches "how to correct pelvic twists and sacro-iliac slips; bring the feet even; level the body as to right and left; and make childbirth easier and safer for the mother and child." Page the faculty committee of the Indiana University School of Medicine; they are overlooking the Great!

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ADJOINING the Indiana exhibit at Cleveland was one from A. M. A. headquarters, in charge of Dr. Bower, an exhibit that should have been seen by every Indiana county society secretary. One feature of this exhibit showed what purported to be the public health activities of various sorts as carried out by county societies in the various states. Vari-colored pins showed where health work was being sponsored by county societies. The Indiana map had a lot of vacant space, only four counties being represented as active in these affairs. Lake, St. Joseph, Vigo and Marion counties were the four thus marked; four counties out of a total of ninety-two! Of course, many other county societies are doing health work and are engaged in various activities of a health-promotion character, but Dr. Bower evidently had not been advised of it. We checked up on the matter and found that the trouble was due to the fact that our county secretaries had not answered a questionnaire sent them some time ago. Thus Indiana failed to make a proper showing.

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ECONOMY. A very acute thought on medical costs has been gleaned from the New York State *Journal of Medicine*. The author wonders why the doctor bill was elected to receive all the attention of a million dollar committee—the late Committee on the Costs of Medical Care. Some such consideration might easily be in order for some of the bigger expenses, such as the automobile bill, which is two or three times as large. Not to mention candy, gum, cosmetics, worthless patent medicine! One might mention the cost of supporting politicians who are boosting the high cost of government higher every year and who selfishly override the President's veto on extravagant bills rather than lose the support of a powerful voting body. Gasoline, gum, cosmetics and the like must be paid for, hence the doctor's bill is ignored. And they complain about one high cost—that of medical care. Here's a thought: How much would it cost to be without medical care? Were it possible to formulate an answer, the cost of medical care would be revealed as the most just and economical expenditure in the world.—*Colorado Medicine*, June, 1934.

AFTER a service of twenty-three years as conductor of the health column in the Chicago *Tribune*, Dr. William A. Evans retires on the pension roll of that paper. Without question the column prepared by Dr. Evans was the best of the many conducted by the metropolitan press; no other medical writer has approached him in his ability to give sound, common sense advice and at the same time use an epigrammatic style which attracted the attention of the reader. Many of his replies were witticisms that might well be preserved. Many such instances might be related, but one or two will suffice to stress the point. It seems that a woman reader had asked advice about using the old Hoosier favorite "spring tonic," sulphur and molasses, as a remedy for pimples. Evans, in his quaint, characteristic style, answered: "Anybody can give it to you; in fact, you close your eyes and mix in almost any proportion; the effect is about the same." To another inquirer about the same subject he replied: "Nothing to it; just disagreeable." We regret to lose Dr. Evans in his field, for he was in a class by himself; he had many imitators, but no equal. Henceforth, his column will be conducted by Dr. Irving S. Cutter, dean of the medical department of Northwestern University.

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THE lay press apparently is becoming physician-conscious. We have noted with a great deal of pleasure the increasing number of comments as to the economic state of the medical profession. The following, reprinted in many newspapers, is taken from the *Literary Digest* of June ninth:

*Would It Be An Insult to Say It With Checks?*

Shelby, Michigan, believes in eulogizing its heroes while they still are alive to enjoy it. Moreover, its citizens seem to have a sense of discrimination about honoring those to whom honor is due.

Forty-six years ago, a young physician named William L. Griffin went to Shelby, hung out his shingle and so informed the townspeople that he was ready to act as their family doctor. He has been acting in that capacity ever since, faithfully filling all the traditional rôles—father confessor, counselor, disciplinarian, philanthropist and, finally, general practitioner.

Soundly enough, the people of Shelby thought it high time they showed their appreciation of Dr. Griffin's services and planned a celebration in his honor. A feature of the program was a grand march by the doctor's "babies"—he has brought more than 3,500 children into the world during the past half-century—and there were many other ceremonies as well. Available reports, however, do not mention one ceremony that would have heartened not only Dr. Griffin, but family doctors everywhere. What a gesture it would have been if all the doctor's solvent patients had paid their bills in full!



# THE CLEVELAND SESSION OF THE AMERICAN MEDICAL ASSOCIATION

JUNE 11-16, 1934

BY

R. L. SENSENICH, M. D.

INDIANA MEMBER OF HOUSE OF DELEGATES  
SOUTH BEND

## PRINCIPLES SAFEGUARDING PATIENT'S INTEREST, PRESCRIBED BY HIS PHYSICIAN

The meeting of the House of Delegates at the eighty-fifth annual session of the American Medical Association, just completed, stands out as having taken definite action upon more phases of the ethical and economic problems which have come upon the medical profession than many earlier sessions. For the first time, those delegated to represent the profession in formulation of policy have, after careful consideration, boldly stated what shall be the qualifications determining the acceptability of any economic type of the practice of medicine. These qualifications are developed wholly upon the basis of accumulated experience of patient-physician relationship throughout the years, and are founded squarely upon the basis that the best interest of the patient shall be the first consideration. It is difficult now to understand why such a statement has been so long in coming. Conservative in action, those giving thought to the policy of the organization representing the profession have been hesitant in the midst of turbulent general economic conditions and shifting public expression to create a platform upon which medical organization should stand. New conditions make an immediate statement of position necessary. Coming at a time when so many different systems were being promulgated and when plans, beautiful on paper but inherently objectionable, were being tentatively entertained by physicians, this clear statement of position furnishes a most important rallying point. A statement of principles rather than a discussion of systems diminishes the danger of confusion by reason of misleading names applied to objectionable plans.

The following ten points which were prepared after mature judgment of studies made by the Bureau of Medical Economics of the American Medical Association of all the existing systems, and after consideration of the many proposed plans, is a veritable "Bill of Rights," directed to the best interests of the patient, as prescribed by the one who best knows the patient's needs—his doctor. The best interests of the patient and the doctor are inseparable:

1. All features of medical service in any method of medical practice should be under the

control of the medical profession. No other body or individual is legally or educationally equipped to exercise such control.

2. No third party must be permitted to come between the patient and his physician in any medical relation. All responsibility for the character of medical service must be borne by the profession.

3. Patients must have absolute freedom to choose a legally qualified doctor of medicine who will serve them from among all those qualified to practice and who are willing to give service.

4. The method of giving the service must retain a permanent, confidential relation between the patient and a "family physician." This relation must be the fundamental and dominating feature of any system.

5. All medical phases of all institutions involved in the medical service should be under professional control, it being understood that hospital service and medical service should be considered separately. These institutions are but expansions of the equipment of the physician. He is the only one whom the laws of all nations recognize as competent to use them in the delivery of service. The medical profession alone can determine the adequacy and character of such institutions. Their value depends on their operation according to medical standards.

6. However the cost of medical service may be distributed, the immediate cost should be borne by the patient able to pay at the time the service is rendered.

7. Medical service must have no connection with any cash benefits.

8. Any form of medical service should include within its scope all qualified physicians of the locality covered by its operation who wish to give service under the conditions established.

9. Systems for the relief of low income classes should be limited strictly to those below the "comfort level" standard of incomes.

10. There should be no restrictions on treatment or prescribing not formulated and enforced by the organized medical profession.

## ATTITUDE OF LABOR IMPORTANT—COMPULSORY INSURANCE OR LIVING WAGE AND FREEDOM OF CHOICE

Prior to the adoption of the ten points, and early in the session so that it might have time for consideration, the writer, with the approval of Drs. Hamer, Cameron, and Crockett of the Indiana dele-

gation, introduced a resolution requesting the Board of Trustees to appoint a committee to determine the attitude of labor toward the proposed common types of sickness insurance, and to inform them as to the medical factors involved. This action was prompted by the communication of the President of the United States, stating that there was in preparation a program of social insurance to be submitted to the Congress in its January session, and the knowledge that powerful groups will exert pressure upon legislators to include in that program some type of sickness insurance. The formation of new groups in labor already has led to suggestion, by some employers, of modified plans of sickness insurance, to some groups of employees in lieu of an adequate living level of wages. This discussion is noteworthy when it has been found by the Bureau of Medical Economics of the American Medical Association that in no instance did organized labor originally demand the institution of sickness insurance. In Europe it has been stated that its establishment has been generally actuated by political motives. As in the present time of active employee-employer negotiations, employee groups will be a factor in any proposed legislation, and as the employee group, of which a large portion falls within the class designated as labor, comprises the largest volume of the practice of medicine, it seemed only wise to learn the attitude of this group toward types of sickness insurance and to be sure that they are informed as to the usual provisions. This resolution was adopted and the Board of Trustees asked that Drs. E. N. Cary, of Dallas, past president of the American Medical Association and F. S. Crockett, of the legislative committee of the A. M. A., and the writer, submit a plan for conference with labor leaders, employers and other interested lay groups with a view to learning their attitude and acquaint them with the medical problems involved. The statement of "principles" which followed the adoption of this resolution strengthens the position of organized medicine in discussing sickness insurance with the groups mentioned, and makes it clear that the position of medical men is based upon the best interests of the patient and not upon a purely selfish viewpoint.

#### COMMERCIAL TENDENCIES REQUIRE DEFINITION OF CODE

Additions to the code of medical ethics were made to meet needs arising from group practice and institutional care, in which by participation of lay members, such as business managers, in the business relationship between physician and patient, principles of professional ethics have not been at times observed properly. Based upon recognition of the fact that groups, no matter how designated, are collections of individual physicians maintaining an individual patient-physician relationship, and that institutions such as hospitals are only the expansion of medical facilities in which the same patient-physician relationship is maintained,

the code of medical ethics as applied to the individual must be observed. Reasoning from the same basis of physician and patient, it is declared contrary to the ethics of the profession for an individual physician to sell his services to a lay organization on a basis which permits a profit to the organization from fees derived from the services rendered by him.

#### UNFAIR PRACTICES—REGULATORY MEASURES

The administration of anesthetics by technicians and nurses was condemned, in that the patient is entitled to the services of a physician trained not only to administer an anesthetic, but also better to judge the physical condition of the patient under anesthesia and to be cognizant of the effect of the anesthetic upon the condition for which treatment is being given. The laws of many states have construed the use of others than qualified physicians as anesthetists as illegal.

The employment of technicians by hospitals, in radiological laboratories and as optometrists, for profit was pointed out as an unfair, illegal and dangerous practice of medicine by an institution.

Clinics, hospitals and other medical institutions were cautioned that publicity claiming superior equipment, facilities and resources must be considered advertising, are objectionable, and that investigation has shown that when such publicity is resorted to, the claims are frequently exaggerated. In the language of the Judicial Council, "There is but one code of ethics for all, be they group, clinic, or individual, and be they great and prominent or small and unknown. It is but a principle of sound ethics that the greater or more prominent an individual or a group may be, the more scrupulous should be the observance of the principles of ethics by them."

Unethical practice of hospitals or their staffs may lead to withdrawal of approval by the Council on Medical Education and Hospitals. The division of fees between hospitals and doctors, acceptance of rebates or concessions from dealers in supplies, as well as contract practice, were especially pointed out as being unethical in character. After repeated deliberation, the House took action to limit the membership on hospital staffs to members of the American Medical Association. It was stated that 87 per cent of hospital staff members are already members. A resolution was introduced by Dr. Joseph A. Pettit of Portland, Oregon, condemning as being unethical "mass contracts" of medical services by hospitals. The Medical Society of the District of Columbia, in a resolution, stated that government medical agencies were giving treatment and free service, never contemplated in the laws that created them, and stated that cabinet officers, high federal officials, senators, representatives, public employees, their families and domestic servants receive free hospitalization in government hospitals and free medical care. In addition, dispen-



saries and so-called clinics in many government buildings are maintained at the expense of the tax-paying people of the United States.

#### MISCELLANEOUS

The report of the legislative committee, of which Dr. F. S. Crockett is a member, dealt especially with new regulations permitting admission of any veteran of any foreign war to veterans' hospitals for medical treatment, even though the disability may have been of non-service source. The admission is to be granted on an affidavit of the veteran that he is unable to pay. Opposition to any renewal of hospital construction to house those whose disabilities are not due to service was expressed.

The Illinois plan of selection of medical offices such as post-surgeon and division-surgeon, as advisers to veteran organizations, was approved as a constructive plan of help to veterans entitled to help and a measure tending to limitation of abuses.

Criticism of the Board of Regents of the College of Surgeons was voiced in a resolution introduced by Dr. Charles J. Whalen of Chicago, for recommendation of a "prepayment plan" (contract health insurance) of payment for services in approved hospitals. The action was referred to as an apparent attempt of a small group of specialists to dominate and legislate for the entire profession.

A plan providing for certification of specialists and defining the minimal amount and character of preparation was accepted. The plan is to be fully operative in 1938.

Attention of the units of the American Medical Association is called to the resolution introduced by Dr. Ralph Fenton of Portland, Oregon, asking that each state and federal relief committee apportioning relief funds include a physician, and that no schedule of fees for medical services to the indigent be approved without the approval of the state medical society.

On a resolution introduced by Dr. O. S. Wightman, of New York, action was taken calling attention of the Federal Radio Commission and various broadcasting companies to the exploitation by means of unsupportable claims for drugs and preparations over the radio. In many respects this approaches the "quackery" of nostrum vendors before the passage of the Food and Drug Act of 1906, which unfortunately it is said applies only to advertising that appears on or in a trade package. The help of the American Medical Association was offered in creating a National Clearing Bureau to advise broadcasting companies as to what is proper medicinal advertising.

A resolution requesting legalization of prescriptions by physicians, for contraceptive measures and investigation of the efficacy of contraceptive devices, was again defeated.

Indiana members of the House of Delegates served on the following reference committees: Spe-

cial Committee on Principles Governing Medical Service, Dr. F. S. Crockett; Committee on Credentials, Dr. Don F. Cameron; Committee on Amendments to Constitution and Code, Dr. R. L. Sen-senich.

The following officers have been elected for 1934-1935:

President-Elect—James S. McLester, Birmingham, Alabama.

Vice-President—George G. Reinle, Oakland, California.

Secretary—Olin West, Chicago.

Treasurer—Herman L. Kretschmer, Chicago.

Speaker of the House of Delegates—Frederick C. Warnshuis, Grand Rapids, Michigan.

Vice-Speaker of the House of Delegates—Nathan B. Van Etten, New York.

Board of Trustees (Term expires 1939)—Roger I. Lee, Boston; Allen H. Bunce, Atlanta, Georgia.

Judicial Council (Term expires 1939)—Emmett P. North, St. Louis.

Council on Medical Education and Hospitals—(Term expires 1940) John H. Musser, New Orleans; (Term expires 1941) Fred Moore, Des Moines, Iowa.

Council on Scientific Assembly—(Term expires 1936) Cyrus C. Sturgis, Ann Arbor, Michigan; (Term expires 1939) Irvin Abell, Louisville, Kentucky.

The House of Delegates voted to hold the next annual session in Atlantic City.

Pursuant to instructions from the officers of the Indiana State Medical Association and the Indianapolis Medical Society, the groundwork has been laid by the Indiana members of the House of Delegates preparatory to extending an invitation to the American Medical Association to hold the eighty-seventh annual session in 1936 in Indianapolis.

The complete report of the proceedings of the House of Delegates appears in the June twenty-third issue of the *Journal* of the American Medical Association.

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#### NOTES FROM THE CLEVELAND SESSION OF THE AMERICAN MEDICAL ASSOCIATION

Probably the most interesting and the best annual session of the American Medical Association ever held was conducted in Cleveland, June eleventh to fifteenth. The registration, both for Indiana and for the Association as a whole, exceeded the registration for any A. M. A. convention within the last five years.

Several Hoosiers were included in the scientific program:

Dr. K. K. Chen, Indianapolis, read a paper on "Clinical Experiences with Thevetin, a Cardiac Glucoside," before the division on pharmacology and therapeutics.

Dr. L. G. Zerfas, Indianapolis, discussed a paper on the intramuscular use of liver extracts.

Dr. J. W. Ricketts, Indianapolis, read a paper before the section on gastro-enterology, his subject dealing with cancer of the rectum.

Scientific exhibits were conducted by Dr. Max Bahr and Dr. Walter L. Bruetsch. The exhibit, from the Central State Hospital, received much favorable comment. It represented the work of a ten-year study on the use of therapeutic malaria in the treatment of neuro-syphilis. In connection with the exhibit, Dr. C. P. Clark, Indianapolis, had a display of visual field charts of malaria-treated patients.

The elaborate display of the Indiana Division of Public Health, under the direction of Drs. Verne K. Harvey and Thurman B. Rice, is discussed elsewhere in this issue.

Dr. R. N. Harger's "drunkometer," which tests the degree of intoxication of an individual, created a great deal of interest.

Dr. E. B. Mumford, Indianapolis, served as chairman of the exhibit committee of the section on orthopedic surgery.

Dr. John Carmack, Indianapolis, was made secretary of the section on otology, rhinology and laryngology.

The work of the Indiana delegates and a report of the work of the House of Delegates of the American Medical Association appears on page 307 of this issue. The Indiana delegates are H. G. Hamer, Indianapolis; R. L. Sensenich, South Bend; Don F. Cameron, Fort Wayne; F. S. Crockett, Lafayette, and F. W. Cregor, Indianapolis, who is a delegate from the Section on Dermatology and Syphilology.

According to an established custom, Dr. James S. McLester, as the new president-elect of the American Medical Association, was invited and has accepted the invitation to be a speaker at the annual banquet of the Indiana State Medical Association in Indianapolis next October.

INDIANA was well represented at the Cleveland session of the American Medical Association. The names of those who registered follow:

C. J. Adams, Kokomo  
E. O. Alvis, Indianapolis  
H. H. Ash, West Lafayette  
M. A. Austin, Anderson  
C. N. Baganz, Uniondale  
H. M. Banks, Indianapolis  
W. E. Barnett, Logansport  
D. A. Bartley, Indianapolis  
R. D. Bayley, Lafayette  
H. F. Beckman, Indianapolis  
J. B. Berteling, South Bend  
R. C. Beeler, Indianapolis  
L. D. Bibler, Indianapolis  
P. J. Birmingham, South Bend  
C. B. Bohner, Indianapolis  
R. M. Bolman, Fort Wayne  
John Bradfield, Logansport  
Frances T. Brown, Indianapolis

L. W. Brown, Fort Wayne  
W. L. Bruetsch, Indianapolis  
R. W. Bruner, Jeffersonville  
Harmon Brunner, Indianapolis  
Eugene L. Bulson, Fort Wayne  
Bert V. Burress, Washington  
Don F. Cameron, Fort Wayne  
G. E. Campbell, Wheeler  
E. R. Carlo, Fort Wayne  
J. W. Carmack, Indianapolis  
E. L. Cartwright, Fort Wayne  
W. F. Carver, Albion  
M. B. Catlett, Fort Wayne  
Harold D. Caylor, Bluffton  
Truman E. Caylor, Bluffton  
K. K. Chen, Indianapolis  
C. P. Clark, Indianapolis  
C. J. Clark, Indianapolis  
Hugh A. Cowing, Muncie

L. T. Cox, Fountain City  
F. W. Cregor, Indianapolis  
George V. Cring, Portland  
F. S. Crockett, Lafayette  
John E. Dalton, Indianapolis  
G. R. Donahue, Lafayette  
M. H. Draper, Fort Wayne  
G. N. Druley, Kokomo  
A. H. Duemling, Fort Wayne  
W. W. Duemling, Fort Wayne  
Ida L. Eby, Plymouth  
F. L. Ely, Indianapolis  
R. M. Evans, Russiaville  
V. N. Fackler, Richmond  
L. Faltin, South Bend  
A. N. Ferguson, Fort Wayne  
L. F. Fisher, South Bend  
P. J. Fisher, Marion  
F. B. Fisk, Indianapolis  
J. C. Fleming, Elkhart  
H. L. Foreman, Indianapolis  
M. G. Frasch, Lafayette  
D. W. Frash, South Bend  
H. W. Gante, Anderson  
F. M. Gastineau, Indianapolis  
Max M. Gitlin, Bluffton  
A. S. Giordano, South Bend  
L. K. Gould, Fort Wayne  
A. B. Graham, Indianapolis  
George F. Green, South Bend  
W. L. Green, Pekin  
H. G. Hamer, Indianapolis  
C. B. Hathaway, Butler  
E. L. Hays, Indianapolis  
V. K. Harvey, Indianapolis  
C. P. Hinchman, Geneva  
C. R. Hoffman, Richmond  
W. W. Holmes, Logansport  
J. E. Hughes, Indianapolis  
E. F. Jones, Marion  
B. A. Kamm, South Bend  
J. E. Keeling, Waldron  
B. G. Keeney, Shelbyville  
W. F. Kelly, Indianapolis  
G. F. Kempf, Indianapolis  
J. V. Kerrigan, Michigan City  
E. F. Kiser, Indianapolis  
H. E. Klepinger, Lafayette  
Bennett Kraft, Indianapolis  
N. A. Kremer, Madison  
E. H. Kruse, Fort Wayne  
Hedwig S. Kuhn, Hammond  
Hugh A. Kuhn, Hammond  
C. J. Langenbahn, South Bend  
V. A. Lapenta, Indianapolis  
B. J. Larkin, Indianapolis  
W. J. Leach, New Albany  
O. F. Lehmberg, Columbia City  
E. O. Lindenmuth, Indianapolis  
R. L. Lochry, Indianapolis  
E. E. Long, Shoals  
C. D. Luckett, English  
C. L. Luckett, Boonville  
H. A. Luckey, Wolf Lake  
R. C. Luckey, Wolf Lake  
B. D. Lung, Kokomo  
H. J. Lynch, Evansville  
Marcus W. Lyon, South Bend  
Martha B. Lyon, South Bend  
W. O. McBride, Fort Wayne  
C. H. McCaskey, Indianapolis  
R. M. McDonald, Mishawaka  
R. E. McIlwain, Marion  
C. R. Marshall, Indianapolis  
J. M. Masters, Indianapolis  
L. R. Mason, Muncie  
Alfred Mathys, Mauckport  
L. T. Meiks, Indianapolis  
H. B. Mettel, Indianapolis  
Milo K. Miller, South Bend  
W. F. Molt, Indianapolis  
Paul D. Moore, Muncie  
R. M. Moore, Indianapolis  
R. B. Moreland, South Bend  
R. H. Moser, Indianapolis  
C. E. Munk, Kendallville  
C. A. Nafe, Indianapolis  
J. R. Nash, Albion  
Harold Nugen, Auburn  
Carroll O'Rourke, Fort Wayne  
F. V. Overman, Indianapolis  
H. J. Pierce, Terre Haute  
M. B. Pontius, Evansville  
H. D. Pyle, South Bend  
F. E. Radcliffe, Bourbon  
C. W. Rauschenbach, Hammond  
L. T. Rawles, Fort Wayne  
C. C. Rayl, Decatur  
B. W. Rhamy, Fort Wayne  
T. B. Rice, Indianapolis  
J. W. Ricketts, Indianapolis  
Floyd Riggs, Terre Haute  
J. O. Ritchey, Indianapolis  
Juan Rodriguez, Fort Wayne  
L. F. Ross, Richmond  
D. H. Row, Indianapolis  
Karl R. Ruddell, Indianapolis  
C. L. Rudesill, Indianapolis  
Ernest Rupel, Indianapolis  
N. L. Salon, Fort Wayne  
I. Sandock, South Bend  
D. W. Schafer, Fort Wayne  
Clarence Schultz, Lagrange  
L. H. Segar, Indianapolis  
R. L. Sensenich, South Bend  
W. I. Scott, Kokomo  
E. M. Shanklin, Hammond  
L. A. Smith, Indianapolis  
W. L. Spalding, Mishawaka  
J. S. Spangler, Kokomo  
R. W. Spenner, South Bend  
E. A. Spohn, Walton  
H. E. Steinman, Monroeville  
D. K. Stinson, Rochester  
P. N. Sutherland, Angola  
John Swanson, Fort Wayne  
W. G. Symon, Garrett  
F. W. Taylor, Indianapolis  
C. F. Thompson, Indianapolis  
H. C. Thornton, Indianapolis  
R. R. Tracht, Crown Point  
W. M. Varble, Jeffersonville  
F. J. Vurpillat, Indianapolis  
E. M. VanBuskirk, Fort Wayne  
W. F. Waller, Angola  
J. H. Warvel, Indianapolis  
A. J. Whallon, Richmond  
H. H. Wheeler, Indianapolis  
Paul H. Wilson, Logansport  
J. L. Wilson, South Bend  
G. B. Wilder, Anderson  
William Wise, Indianapolis  
W. N. Wishard, Sr., Indianapolis  
George Wood, Indianapolis  
W. C. Wright, Fort Wayne  
M. D. Wygant, Mishawaka  
Noah Zehr, Fort Wayne  
Leon G. Zervas, Indianapolis



## THE "INDIANA PLAN" AT THE CLEVELAND MEETING

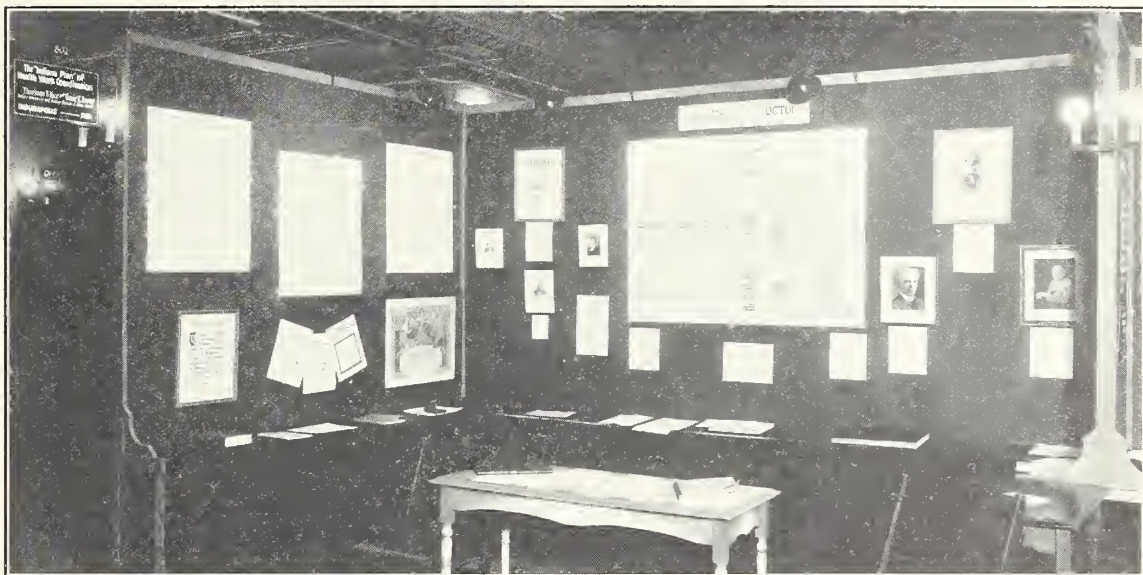


Exhibit of Indiana Division of Public Health at Cleveland session of American Medical Association.

The idea of having the health work of the state under the sponsorship of the medical profession is receiving a great deal of attention throughout the United States. Drs. Harvey and Rice were asked to present the "Indiana Plan" as part of the scientific exhibit of the American Medical Association at Cleveland. This they did and the picture of the exhibit is herewith reproduced. The keynote of the display was that health work is properly under the leadership of the medical profession and the manner in which this has been brought about in the new set-up was set forth in conversation with the visitors at the booth. In order to make a suitable background for the central piece in the exhibit several pictures of doctors—all of them now dead—were displayed. Most prominent were the pictures of Dr. Hurty, the nestor of public health in Indiana; Dr. Harvey Wiley, the food expert who began his work in this state; and Dr. Frank Wynn, who was the originator of the scientific exhibit idea in the meetings of the American Medical Association.

The exhibit received a great deal of attention, particularly from health officers and heads of medical societies and associations. In most states it seems that the health work has gotten away from the medical profession. On every hand we heard expressions pointing to the rather obvious conclusion that such a condition is wrong and should be corrected. We were happy to say to the visitors at the booth that the Division of Public Health is receiving splendid cooperation on the part of the

medical profession and that we are saving approximately \$100,000 per annum of the taxpayers' money. The effort and expense involved in putting the plan before the profession was, in our opinion, well worth while.

The "Indiana Plan" is attracting attention throughout the United States. It already has been presented to various groups outside of Indiana, and in the near future will be explained at the national meeting of the American Association of School Physicians, and in the fall to the American Public Health Association at Pasadena, California. In a talk before the Fifth District Medical Society a few days ago, Dr. W. W. Bauer, director of the Bureau of Public Health and Instruction of the American Medical Association, praised the exhibit most highly.

The "Indiana Plan" is considered to be one of the most nearly ideal of any that has come to the attention of organized medicine. In the next issue of *THE JOURNAL* it is planned to reproduce a diagram outline of the work of the Indiana Division of Public Health. Every Indiana physician will be interested in knowing the plan of work that is followed.

Drs. Harvey and Rice were in constant attendance at the exhibit and received many valuable criticisms and suggestions whereby the "Indiana Plan" can be made even more effective. If you attended the Cleveland session, we hope that you visited the booth of the Indiana Division of Public Health.

## THE PRESIDENT'S PAGE

### OUR DISTRICT MEETINGS

Now that we have all but finished the annual round of district meetings in the state, we feel more than ever like repeating that which we have said on various occasions during the year, namely, that we believe organized medicine in Indiana is in better condition as regards organization than at any other time in the history of our Association.

This assertion is based on more than one outstanding fact. First, the meetings are mighty well attended. Second, the programs are far above the average. Third, there is a fine spirit of co-operation among the members. And, fourth, there is every evidence of interest in the organization manifested by the young men.

Back of this result, as always, there is a cause. In this case, we believe, there is more than one cause. First, the general economic depression has made us all realize the necessity for organization; wherever there is organization there is likely to be cooperation, and wherever there is cooperation there is accomplishment. Second, all our officers and publications have emphasized to an unusual degree the necessity of union and cooperation for the good of the public and the profession. Third, from various outside sources which have tried to chisel in through the lay press and by personal efforts, we are more than ever convinced that the future welfare of our profession depends first, last, and all the time upon us.

As a result of this we believe, as we always have believed, that if the socialization of medicine in America had to depend upon the attitude of the physicians in Indiana, it would not have a ghost of a chance.

### NURSING HOURS

Our old reliable co-workers and faithful friends, the nurses, are again apparently becoming all steamed up about the eight hour day in nursing. It was my privilege, one afternoon recently, to listen to a most able presentation of the subject by their National President. There is plenty of good sense in many of the claims they make, and while I personally never like to think of anything connected with our work in terms of hours and wages, probably some changes relative to working hours for graduate nurses are coming. Again it is our duty to lend a helping hand in solving their problems. Undoubtedly some plan can be evolved for the good of our patients, and to the satisfac-

tion of both the nursing and the medical professions. Whether this is the time for such a campaign is quite another question. I sincerely hope that they will not find themselves regimented and sent to Podunk, or elsewhere, on a thirty hour week at two dollars per day.

### MORALE

The morale of our men is markedly improved in all parts of the state. There is more cheerfulness and a brighter outlook for the future. We are feeling more secure in our footing. We are coming out of the depression in better shape than many other classes of our citizens, regardless of the fact that our sacrifices were in many cases extreme. In reality, we have all learned what it means to give until it hurts. To back this up, our Executive Secretary can show you a record of paid-up dues this year far in excess of that at the same time last year. To the glory of all concerned be it said that up to date our ranks have not been smeared by any wild schemes of socialization.

### POSTGRADUATE WORK

This year has been very encouraging from the standpoint of postgraduate study, and not without cause for, again, where there is interest there is accomplishment. Improvement in programs is noted everywhere, and this is an inevitable result of better organization.

I have listened to some of the best papers in county societies that it has ever been my privilege to hear. Our district meetings have been all that anyone could wish in the way of scientific talent.

Our own postgraduate course at Evansville was excellent.

Indiana University put on a two weeks' course of intensive postgraduate work of which every physician in Indiana should be proud.

Do not forget that there will be a real treat for everyone of us in our state program this fall.

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Be sure to read your delegate's report on proceedings of the House of Delegates at the Cleveland session of the American Medical Association. It appears on page 307 in this issue.

*E. E. Padgett.*



DIPHTHERIA REPORT FOR MAY, 1934

Four deaths from diphtheria were reported for the month of May. Two deaths occurred in the same family in Dubois County. The other two deaths, one from Allen County and one from Lawrence County, permit this interesting observation: In both the immediate cause of death was indicated on the death certificate as myocarditis. This calls our attention to the fact that the welfare of the heart is an extremely important consideration in diphtheria. The patient must not be permitted to put any strain upon the heart for some considerable time after the acute stage of the disease. Antitoxin at the very earliest moment possible and post-febrile care of the heart are extremely important.

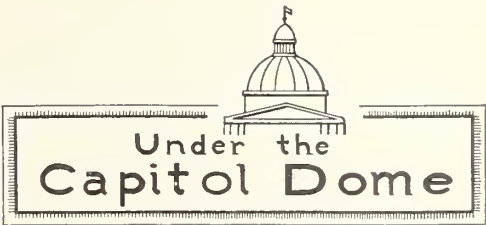
Without wishing to assume a critical attitude, we feel obligated to say that these deaths should have been prevented. Allen County has had an epidemic for two or three years. Lawrence County has also had a high rate for a long time, and the two deaths in one family in Dubois County certainly look strange in this day and age.

To date there have been forty deaths for the year, which is twenty per cent less than the lowest previous figure, in 1931.

The Diphtheria Prevention Committee and the Indiana Division of Public Health are extremely interested in the diphtheria death rates and are trying very hard to pull the figure to the lowest possible level. It requires more than this, however, as is very obvious in the present instance.

Below will be found a detailed account of the diphtheria deaths for the month of May and for the present year:

County	May 1934	Total for 1934
Allen .....	1	5
Blackford .....	0	1
Delaware .....	0	1
Dubois .....	2	2
Gibson .....	0	1
Grant .....	0	1
Greene .....	0	1
Harrison .....	0	1
Jackson .....	0	2
Knox .....	0	2
Lake .....	0	2
Lawrence .....	1	4
Marion .....	0	3
Martin .....	0	1
Montgomery .....	0	1
Perry .....	0	4
Spencer .....	0	2
Warrick .....	0	1
Vanderburgh .....	0	2
Vermillion .....	0	1
Wayne .....	0	2
Total .....	4	40



PAYMENT OF MEDICAL AID OBLIGATIONS INCURRED FOR  
POOR RELIEF

In answer to several inquiries from Indiana physicians, Mr. M. K. Madden, auditor and statistician of the Governor's Commission on Unemployment Relief, has written a general statement of policies regarding the payment of medical aid obligations incurred for poor relief, and quotes excerpts from the Federal Emergency Relief Administration Rules and Regulations No. 7 pertaining to medical care provided in the homes to recipients of poor relief. The quotations and Mr. Madden's comments follow:

"These funds may not be used for the payment of hospital bills or for providing general institutional care. These necessary services to the destitute should be made available through state or local funds."

"To recognize within legal and economic limitations the traditional family and family-physician relationship in the authorization of medical care for indigent persons in their homes."

"The physician, nurse and dentist to furnish the same type of service to an indigent person as would be rendered to a private patient, but that such authorized services shall be a minimum consistent with good professional judgment and shall be charged for at an agreed rate which makes due allowance for conservation of relief funds."

"Federal Emergency Relief funds shall not be used in lieu of local and/or state funds to pay for established services (hospitals, clinics, dental and nursing services) already established in the community and paid for from local and/or state funds."

"The phrase 'in their homes' shall be interpreted to include office service for ambulatory patients, with the understanding that such office service shall not supplant the services of clinics already provided in the community."

"Medical care shall not be authorized by relief administrations for conditions that do not cause acute suffering, interfere with earning capacity, endanger life, or threaten some permanent new handicap that is preventable when medical care is sought."

"All fees shall be established on the basis of an appreciable reduction from the prevailing minimum charges for similar services in state and local communities with due recognition of the certainty . . . of payment that authorization from the local relief administration insures. This schedule shall only apply where the expenditure of federal relief

funds is involved and shall not preclude the payment of additional amounts from local funds."

From the foregoing and from careful examination of Rules and Regulations No. 7 there can be no doubt but that the FERA intends that federal funds shall be used only for the care in the home. Thus, the distinguishing feature as to whether aid extended is chargeable from federal funds is not whether the aid is of an emergency nature, but rather whether the aid was extended in the home or office or in an institution such as a hospital.

The Governor's Commission on Unemployment Relief has endeavored to follow the policies outlined by FERA as regards medical care since the issuance of this bulletin in the fall of 1933. There has been no change of policy within the last few months. It is quite possible that many physicians throughout the state located within counties benefiting by the distribution of federal funds granted for direct relief may believe a change has been made. This apparent change was brought about by the adoption of a new system of disbursing, whereby, instead of putting FERA funds in the hands of the various county auditors for disbursement, all claims for poor relief granted in various counties are sent to the state office where checks payable to the individual claimants are written. We have found that under the system of disbursement as followed until March of this year that many medical aid claims, which in reality represented hospitalization, were being paid from FERA funds. This practice has, of course, not been followed since the adoption of centralized disbursements from the state office.

\* \* \*

Information concerning medical aid costs in Indiana for January, February and March, 1934, are given herewith:

In the state during January the total medical aid cost was \$70,477.57, which represented an average cost per relief case of \$1.13. The cost for the state, exclusive of Marion County (which has free medical care at the City Hospital), was \$69,229.99, which represented an average cost per relief case of \$1.33.

In the state during February the total medical aid cost was \$69,849.75, which represented an average cost per relief case of \$1.02. The cost for the state, exclusive of Marion County (which has free medical care at the City Hospital), was \$68,990.18, which represented an average cost per relief case of \$1.21.

The number of cases on relief rolls in February showed an increase of 8.88% over January and the medical aid cost showed a decrease of .89% over January. This decrease in medical aid cost,

coupled with an increase in the number of cases on relief rolls, reduced the medical aid cost per case \$0.11.

The total medical aid cost July, 1933, to and including February, 1934, was \$568,078.84, which represented 8.56% of the total expenditures for direct relief.

Of the total expenditure of \$568,078.84 for medical aid from July, 1933, to and including February, 1934, approximately \$300,000.00 was paid from federal funds.

Of the total expenditure of \$69,849.75 for medical aid for February, 1934, approximately \$25,000.00 was paid from federal funds.

In the state during March the total medical cost was \$86,959.65, which represented an average cost per relief case of \$1.07. The cost for the state, exclusive of Marion County (which has free medical care at the City Hospital), was \$85,585.60, which represented an average cost per relief case of \$1.28.

The number of cases on relief rolls in March showed an increase of 17.40% over February and the medical aid cost showed an increase of 24.05%, which was 6.65% larger than the corresponding increase in cases on relief. This factor increased the medical aid cost per case \$0.05.

Of the total expenditure of \$86,959.65 for medical aid for March, 1934, approximately \$15,000.00 was paid from federal funds.

The amount of medical aid paid from federal funds was smaller than it has been in the past. The reason is our disallowing many medical aid claims submitted to us because they were much higher than what we believed to be a fair charge for the services rendered. Also many claims had no itemization as to the nature of treatments given.

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#### LABORATORY TECHNICIANS AND DIAGNOSIS

Laymen and technicians who are not registered physicians are violating Indiana medical laws when they operate laboratories for diagnosis of disease, according to an opinion issued recently by Philip Lutz, Jr., Attorney General. The opinion was written at the request of Ruth V. Kirk, clerk of the State Board of Medical Registration and Examination.

This "laboratory form" of practicing medicine is a clear violation of the state medical registration laws in the opinion of the Attorney General. "It is our conclusion," Mr. Lutz wrote, "that anyone on his own responsibility engaging in the performance of diagnostic tests wherein said test report includes the conclusion of the analyst as to the form or manner or kind of disease with which the person is afflicted, or in any manner prescribes or gives advice as to treatment, is practicing medicine



and comes within the jurisdiction as set out in the state's medical regulatory act."

The analyst does not violate the law when he reports only the "constituent parts of a fluid," the opinion said, but "it follows that an analyst practices medicine when he does more than report the constituent parts of a fluid.

"Pursuing this thought further, it is our conclusion that this analyst when, after having reported the component parts of this fluid, reports that the person is suffering from diphtheria or from some other disease, that analyst ceases to be such and places himself in the field of diagnosticians. When he does that he comes within the letter of the law as defined in the practice of medicine," the Attorney General held.

\* \* \*

#### GROSS INCOME TAX IN 1933

Indiana's physicians and surgeons paid \$69,494.47 in gross income tax last year, according to an analysis of payments of the professional groups just completed by the Income Tax Department. As a group they paid more than any other profession; but the average payment for each physician or surgeon was less than that paid by members of several other professional groups.

The Income Tax Department's analysis showed that 2,662 physicians and surgeons filed reports and paid taxes on gross receipts amounting to \$7,790,112.33. The entire professional group, comprising eleven divisions, paid taxes of \$233,796.70 on gross receipts of \$27,482,578.15. The professional group was made up of 10,001 individuals in the various professions, and they paid 2.97 per cent of the entire gross income tax receipts. The physicians and surgeons paid .88 per cent of the state total collections.

The analysis, which showed incidentally that there is one tax-paying physician for each 1,217 persons of the total state population, set out that the medical group paid \$68,916.39 in taxes at one per cent and \$578.08 in taxes at one-fourth of one per cent—the manufacturing rate. The group paid taxes amounting to \$0.021 per capita for the state population.

The average tax paid by each physician or surgeon was \$26.11. Taxes were paid last year on receipts for eight months—May 1 to December 31.

Opticians, optometrists and oculists paid a higher average tax than the medical group, their average per member of the professions being \$28.33. The returns showed 277 members of the optical professions as gross income taxpayers. This group, although paying a larger average amount, contributed only \$7,847.66, or .10 per cent of the total gross income tax for the period.

Another group that paid a higher average tax than physicians and surgeons was the attorneys.

Their average tax was \$29.52. Reports were received from 1,977 attorneys who paid in \$58,370.01, or .74 per cent of the total collections.

Accountants likewise were in a higher bracket than the medical men. Their average tax was \$27.97. But there were only 174 of them reporting and they paid only \$4,866.75, or .06 per cent of the total tax collections.

Engineers and architects likewise fell into a higher tax bracket than physicians and surgeons. Their average payment was \$38.18. This group comprised only 156 men and women, who contributed a total of \$5,955.80 in taxes.

The highest average of all was paid by the undertakers and funeral directors, whose average was \$40.08 per member. A total of 982 morticians paid taxes amounting to \$39,358.24, or .50 per cent of the entire total gross income tax collections.

Gross receipts of the groups paying more tax per member than physicians were: opticians, optometrists and oculists, \$1,033,190.48; attorneys, \$5,875,372.86; accountants, \$561,118.67; engineers and architects, \$833,583.03; undertakers and funeral directors, \$4,727,035.73.

The other professional groups paid less gross income tax per member than the medical group. Dentists paid an average of \$14.24. Their total income for 1,212 taxpayers was \$2,250,719.37, upon which they paid \$17,263.43, or .22 per cent of the total tax for the period.

Chiropractors, osteopaths and podiatrists, who were grouped together, paid an average tax of \$11.39. There were 210 members of this group reporting. Their total tax was \$2,392.63 on receipts of \$316,133.76, or .03 per cent of the grand total collection.

Veterinarians, of which 225 reported, paid an average tax of \$12.59. The entire group paid \$2,832.69 on gross receipts of \$355,669.15.

Clergymen paid the smallest average tax in the professional group. Their average payment was only \$5.86. A total of 1,102 ministers paid taxes amounting to \$6,461.54 on gross receipts of \$1,291,176.24.

Another group of miscellaneous professional men designated as "other professional services" in the analysis paid an average tax of \$18.51. There were 1,024 taxpayers in this group. Their gross receipts were \$2,448,466.53, upon which they paid taxes amounting to \$18,953.48.

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#### RESIGNATION OF WILLIAM BOOK

William H. Book, who has been director of the Governor's Commission on Unemployment Relief, has resigned to become executive vice-president of the Indianapolis Chamber of Commerce. No successor for Mr. Book has been named by Governor Paul V. McNutt.

## SECRETARIES' COLUMN

On behalf of the county secretaries of the state, I want to thank Dr. Gatch and the Indiana University Medical School for the excellent dinner served to the secretaries on May twenty-second. Dr. Dean Lewis, President of the A. M. A., was the guest speaker. I am sorry that some of the secretaries missed this opportunity to hear Dr. Lewis.

I understand that a code for the medical profession in industry was formulated last October and was sent to the NRA; nothing was done at that time. I understand from good authority that there is a bill in congress, or about to be presented to congress, to socialize medicine in industry. If this session of congress ends without such a bill, be sure and send your objections to the men who want to be elected to congress this fall.

### A HEALTH SERVICE PLAN IN MICHIGAN

The rising unrest of the general public over the costs of medical care is reflecting itself in the medical profession, which formerly stood coldly aloof to any suggestion that conditions might be bettered. The depression, which has drastically cut physicians' incomes while millions of the population lack adequate medical care, undoubtedly has caused some hard thinking among even conservative doctors. An example of the profession's changing attitude is the plan for mutual health service recently approved in principle by the House of Delegates of the Michigan State Medical Society, which had voted against it a year ago. The society was sufficiently interested in the subject to spend \$15,000 on detailed study of socialized health plans.

The Michigan plan has not been fully worked out and, if adopted, will probably be tried in one county before being applied to the entire state. It calls for annual payment of about \$118 by each family, for which its members will receive full medical, dental, optical, and hospital care, plus medicines and prescribed appliances. It would be limited to families of \$1,500 annual income or less. Control would be vested in a board of eleven, including two laymen. The Michigan group aims to keep control in medical hands, to enable the patient to make free choice of physicians, to exclude all commercial exploitation.

Limiting the plan to families of less than \$1,500 income is a lower level than in other plans of this kind in use abroad. The annual fee of \$118, while exceedingly reasonable for the many services included, would seem burdensome for families of this low income group. However, it is an effort in a wholesome direction, whose details may be worked out more fully later, in the light of results and experience. Both physicians and public will benefit by such a plan for medical care. The proposal indicates the trend that is developing in solving the problem.

A. M. MITCHELL, *Chairman.*

## DEATH NOTICES

EDGAR W. RINE, M. D., Winchester, died June fifth, aged seventy-five years. Dr. Rine was a graduate of the Starling Medical College, Columbus, Ohio, in 1885.

A. W. SNYDER, M. D., of Indianapolis, died June thirteenth, aged eighty-one years. Dr. Snyder graduated from the Central College of P. and S., Indianapolis, in 1901.

NORMAN M. SPRADLEY, M. D., of Boonville, died June fourth, aged seventy-three years. Dr. Spradley graduated from the Louisville Medical College, Louisville, Kentucky, in 1890.

WALTER H. LEWIS, M. D., Pendleton, died May thirty-first, aged eighty-five years. Dr. Lewis graduated from the University of Pennsylvania School of Medicine, Philadelphia, in 1873.

WILLIAM HENRY READER, M. D., New Amsterdam, died May twenty-fifth, aged eighty-three years. Dr. Reader graduated from the Kentucky School of Medicine, Louisville, in 1878.

MAX VON BEUST, M. D., of New Albany, died May twenty-fourth, aged eighty years. Dr. von Beust had retired from active practice several years ago. He was a graduate of the Hospital College of Medicine, Louisville, Kentucky, in 1881.

S. L. LINGLE, M. D., of Paoli, died June fifteenth, aged sixty-seven years. Dr. Lingle graduated from the University of Louisville, Louisville, Kentucky, in 1891. He was a member of the Orange County Medical Society, the Indiana State Medical Association and the American Medical Association.

EDGAR A. HAWK, M. D., of New Palestine, died June twelfth, aged fifty-five years. Dr. Hawk was a member of the Hancock County Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from the Central College of Physicians and Surgeons, in Indianapolis, in 1905.

OLGA HOFFMAN, M. D., of North Madison, died June fifteenth, aged thirty-three years. Dr. Hoffman was supervisor of the woman's department at the Madison State Hospital. She graduated from the Indiana University School of Medicine in 1931, and was a member of the Jefferson County Medical Society, the Indiana State Medical Association and the American Medical Association.



HARVEY H. MARTIN, M. D., Laporte, died May twenty-seventh, aged sixty-three years. Dr. Martin served as a surgeon in France during the World War. He was a member of the Laporte County Medical Society, the Indiana State Medical Association, the American Medical Association, and a Fellow of the American College of Surgeons. Dr. Martin graduated from the Chicago Homeopathic Medical College in 1895.

GEORGE W. FINLEY, M. D., Brazil, died June nineteenth, aged seventy-nine years. Dr. Finley was the oldest practicing physician in Clay County, where he had practiced for more than a half century. Dr. Finley was an honorary member of the Clay County Medical Society, the Indiana State Medical Association and the American Medical Association. He had served as president of his county medical society. He graduated from the Medical College of Indiana, Indianapolis, in 1890.



## HOOSIER NOTES

MRS. JOHN ASA GIBBONS, wife of Dr. Gibbons, of Mitchell, Indiana, died May twenty-ninth.

DR. WERNER W. DUEMLING, of Fort Wayne, has been elected to membership in the American Dermatologic Association.

DR. WALDO C. FARNHAM has returned to his practice in South Bend after doing some postgraduate work in Europe.

MISS RUTH ADAMS, of Indianapolis, and Dr. William B. Matthew, of Gary, were married in Indianapolis, June second.

MISS HELEN DICE, of Indianapolis, and Dr. W. L. Pugh, who recently located at Milroy, were married June second, in Indianapolis.

MISS ONA EMILY BOYD, of Indianapolis, and Dr. Herbert S. Dieckman, of Evansville, were married May twenty-fourth, in Indianapolis.

DR. RUSSELL W. LAVENGOOD, of Marion, has been doing postgraduate work at Washington University, St. Louis, for the past several weeks.

DR. CHARLES P. EMERSON, Indianapolis, in June was awarded an honorary degree of Doctor of Science by his alma mater, Amherst College, Amherst, Massachusetts.

DR. LESLIE M. JONES, of Jackson, Michigan, has been made superintendent of Epworth Hospital at South Bend, succeeding Miss Margaret R. Parker, who has resigned.

THE American College of Physicians has selected Philadelphia as its meeting place for 1935. Dates of the nineteenth annual clinical session will be April 29 to May 3, 1935.

DR. AND MRS. FRANK E. WIEDEMANN, of Terre Haute, will leave the first of July for Russia and Scandinavian countries. Dr. Wiedemann is interested in research work being done in Moscow and Leningrad.

DR. J. R. YUNG, of Terre Haute, has been made president of the American Association for the Study of Goiter. He will serve in 1935. Dr. Yung has been secretary of the association for a period of several years.

DR. A. BERNICE MORRIS, Indianapolis, and Dr. Aubrey H. Williams, of Fort Wayne, were married in Indianapolis, June twelfth. Each received the M. D. degree from Indiana University School of Medicine in June.

DR. M. C. MCKAIN, of Columbus, is attending the European assemblies of the Inter-State Postgraduate Medical Association of North America. During his absence, Dr. A. P. Roope has returned from Florida to look after Dr. McKain's practice.

THE thirteenth annual scientific and clinical session of the American Congress of Physical Therapy will be held in Philadelphia, at the Bellevue Stratford, September 10 to 13, 1934. Complete program may be obtained by writing to the American Congress of Physical Therapy, 30 North Michigan Avenue, Chicago, Illinois.

DRS. WILLIAM N. WISHARD, SR., and Leon G. Zervas, of Indianapolis, attended the unveiling of a plaque in memory of pioneer physicians at Harrodsburg, Kentucky, June twenty-first. An invitation was extended to Indiana physicians by Dr. A. T. McCormick, secretary of the Kentucky State Medical Association, to participate in the celebration.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Billhuber-Knoll Corporation

Dilaudid

Ampules Solution Dilaudid, 2 mg. (1/32 grain), 1.1 cc.

Hypodermic Tablets Dilaudid, 2 mg. (1/32 grain)

Hypodermic Tablets Dilaudid, 3.2 mg. (1/20 grain)

Hypodermic Tablets Dilaudid, 4 mg. (1/16 grain)

Tablets Dilaudid, 2.5 mg. (1/24 grain)

H. E. Dubin Laboratories, Inc.

Aminophyllin-Dubin

Ampules Solution Aminophyllin-Dubin, 0.24 gm., 10 cc.

Ampules Solution Aminophyllin-Dubin, 0.48 gm., 2 cc.

Suppositories Aminophyllin-Dubin, 0.36 gm.

Tablets Aminophyllin-Dubin, 0.1 gm.

Gilliland Laboratories, Inc.

Diphtheria Toxoid, Alum Precipitated (Refined)  
Schering & Glatz, Inc.

Medinal

Medinal Tablets, 5 grs.

Medinal Suppositories, 10 grs.

Frederick Stearns & Co.

Neo-Synephrin Hydrochloride

Solution Neo-Synephrin Hydrochloride, 0.25 per cent

Solution Neo-Synephrin Hydrochloride, 1 per cent

Winthrop Chemical Co., Inc.

Chinifon-Winthrop

Tablets Chinifon-Winthrop, 0.25 gm. (4 grains)

The following product has been accepted for inclusion in the list of articles and brands accepted by the Council but not described in N. N. R. (New and Nonofficial Remedies, 1934, p. 443):

Cheplin Biological Laboratories, Inc.

Cheplin's Epinephrine Hydrochloride Solution  
1:1000 Ampules 1 cc.

## INDIANA UNIVERSITY NEWS NOTES

A COLLECTION of thirteen medical works by writers of 75 to 100 years ago has been contributed to the Indiana University Medical Center Library by Dr. Stephen B. Sims, Frankfort. One of the main sources of interest in the new collection is that showing the development of medicine during the past century. Most of the volumes are by American writers.

DR. LOUISE F. SCHNUTE, who was graduated from the Indiana University School of Medicine last year with the M. D. degree, has been appointed resident physician in pediatrics in the University of Michigan Hospital for next year. Dr. Schnute has held an internship at the hospital during the present year.

MOVING pictures of heart sounds, providing more accurate diagnosis of heart diseases and permanent records for observation and teaching purposes, were announced in Indianapolis recently by research workers of the Indiana University Department of Cardiovascular Diseases in connection with the annual postgraduate medical course of the university. The new method involves use of the cathode ray oscillograph. A super-sensitive microphone attached to a stethoscope conducts heart sounds through radio amplifying tubes, where electrical impulses are carried through the cathode ray oscillograph and converted into graphs which are permanently recorded on a motion picture film. The film then is available for diagnostic or teaching purposes or for comparative study of progressive heart diseases.

The new cathode ray oscillograph diagnosis of heart diseases differs from that with the electrocardiograph which is commonly used. The cardiograph registers the electrical energy generated by the heart beat, while the cathode ray oscillograph makes a record of heart sounds.

Sound of the heart beat is often a more highly refined measure of heart condition than are the mere electrical currents set up in a physical way and shown by the cardiograph. The cathode ray oscillograph with its minute record of sounds of the heart beat is, therefore, regarded more accurate in diagnosis, while at the same time it traces on moving picture film a permanent record of the heart condition.

AT THE recent commencement exercises of Indiana University held June 11 in the Memorial Stadium, degrees were awarded to approximately 1,000 students. Included in this group were 33 students who received the doctor of dental surgery degree, 115 the doctor of medicine degree, 11 the doctor of medicine degree cum laude, 44 the bachelor of science degree in medicine, and 24 the graduate nurse degree.

Students granted these degrees are as follows:

Doctor of Medicine: Marion C. Aker, Reelsville; Frank Albertson, Vallonia; Jesse C. Ambrose, Anderson; Wendell C. Anderson, Mentone; Paul B. Arbogast, Bloomington; Theodore D. Arlook, Elkhart; Frederic L. Baer, Indianapolis; Ralph E. Barnett, Franklin; Traian T. Benchea, Indiana Harbor; Ralph E. Blackford, Middletown, Ohio; Eleanor H. Blackledge, Indianapolis; Adolph E. Blatt, Indianapolis; Henry Bodner, Indianapolis; McKinley J. Bohannon, Terre Haute; Norman R. Booher, West Lafayette; David Bornstein, Paterson, N. J.; Donald W. Brodie, Oaklondon; George M. Brother, Rockport; Wendell E. Brown, Indianapolis; Neal D. Carter, Indianapolis; Grace Cauffman, Gallipolis, Ohio; William J. Clauser, Delphi;



Frank H. Coble, Richmond; Henry G. Coleman, Palmyra; John H. Combs, Indianapolis; Kenneth E. Comer, Mooresville; Perry E. Cotton, Elwood; Rex W. Dixon, Indianapolis; Melvin Durkee, Evansville; David E. Engle, Frankfort; (Mrs.) Florence Smith Falvey, Indianapolis; William R. Ferraro, Paterson, N. J.; Robert J. Fraser, Marion; Max D. Garber, North Manchester; Frederick L. Giles, Bloomington; Maurice E. Glock, Fort Wayne; John T. Hardesty, Marion; Carl B. Harris, Hobart; Robert B. Hart, Columbus; August M. Hasewinkle, Indianapolis; James H. Hawk, New Palestine; Gladys M. Hill, Indianapolis; Robert E. Hill, Muncie; Richard W. Holdeman, Elkhart; Charles O. Holder, Indianapolis; Charles E. Holland, Bloomington; John K. Humphries, Monticello; Eugene R. Inwood, South Bend; Robert E. Jewett, Wabash; Oran E. Kay, Freedom; Benjamin V. Klain, Indianapolis; Julia G. Kuzmitz, Gary; Arthur Leiter, Kendallville; Emil T. Leslie, Folsomville; David H. Levy, Youngstown, Ohio; James S. McElroy, Newberry; Robert S. McElroy, Scotland; William O. McQuiston, Paxton, Ill.; William E. Maine, Gary; Fred R. Malott, Converse; Hugh E. Martin, Shelburn; Earl W. Mericle, Bargersville; Basil M. Merrell, Waynetown; Robert B. Miller, Argos; Temple M. Miller, North Judson; George H. Mitchell, Indianapolis; Saint Reginald Monachino, New York, N. Y.; Almeda B. Morris, New Haven; William M. Mount, Kirklint; Hugh K. Navin, Terre Haute; Preston M. Nesbit, Princeton; Frank M. Nichols, LaGrange; Frank W. Oliphant, Indianapolis; Darrell O. Overpeck, Brazil; Robert W. Owsley, Throntown; Vernon K. Pancost, Elkhart; Modesto R. Paragas, Indianapolis; William Paris, Paterson, N. J.; Charles H. Proudfit, Osceola; Hugh S. Ramsey, Bloomington; Edgar E. Richards, Terre Haute; Granville L. Richey, Columbus; Wayne L. Ritter, Indianapolis; O. Raymond Russell, Lapel; Lillian E. Scheib, South Bend; Charles P. Schneider, Evansville; Charles H. Schutt, Elkhart; Samuel L. Scott, Jr., Jeffersonville; Michael Shellhouse, Gary; Philip M. Shipper, New York, N. Y.; Robert D. Spindler, Cedar Lake; Dick Steele, Huntington; William R. Storer, Indianapolis; John R. Surber, Muncie; William E. Sutton, Cambridge City; Richard W. Terrill, Lawrenceburg; Hugh K. Thatcher, Jr., Indianapolis; Thomas K. Tower, Leavenworth; Carl J. Trout, Windfall; Marshall B. Tucker, Claypool; William C. Vance, Indianapolis; Anthony W. Ventimiglia, Bloomington; Jeanne T. Waldo, Indianapolis; Robert K. Webster, Indianapolis; Joseph L. West, Indianapolis; Aubrey H. Williams, Fort Wayne; George W. Wilson, Dale; Robert H. Wisheart, North Salem; Donald J. Wolfram, Brownsburg; Abram S. Woodard, Jr., Indianapolis; Robert C. Wybourn, Ossian; John McC. Young, Indianapolis; Leman R. Young, Indianapolis; Paul F. Zwerner, Terre Haute; Harold F. Zwick, Decatur.

Doctor of Medicine cum laude: Charles H. Ade, Lafayette; (Mrs.) Mary Edith Keller, Lafayette; Carl J. Harmon, Valparaiso; James T. Morrison, Greensburg; Bernard D. Rosenak, Indianapolis; Robert K. Walker, Scottsburg.

Bachelor of Science in Medicine: Raymond N. Adler, Evansville; Douglas F. Barkley, Odon; Ralph E. Barnett, Franklin; Charles M. Bowman, Albion; Chester C. Conway, McCordsville; David Doktor, Paterson, N. J.; Albert M. Donato, Bloomington; Herbert L. Egbert, Indianapolis; Milton W. Erdel, Frankfort; Robert J. Fraser, Marion; Ralph A. Gettelfinger, Ramsey; Maurice E. Glock, Fort Wayne; Simon Gold, Indianapolis; Merrill H. Goodwin, Selma; Lenpha P. Hart, Evansville; Gilson Hild, Indianapolis; Robert E. Holsinger, Fort Wayne; Abraham Jackson, Paterson, N. J.; Robert E. Jewett, Wabash; Richard B. Johns, Bloomington; Wendell C. Kelly, Indianapolis; Chang S. Kim, Chairyung, Korea; Emil T. Leslie, Folsomville; Paul L. Long, Anderson; James S. McElroy, Newberry; James M. McFadden, Jr., Bedford; Charles H. Maly, Indianapolis; Orlando L. Meyer, Bluffton; Charles E. Moehlenkamp, Evansville; Hugh K. Navin, Terre Haute; Vernon K. Pancost, Elkhart; Elroy Pasternack, Passaic, N. J.; Lewis Pollak, Indianapolis; Clarence E. Reich, Evansville; Lester L. Renbarger, Marion; Marion Roudebush, Noblesville; Gerald Shortz, LaCrosse; Dick Steele, Huntington; William E. Sutton, Cambridge City; James H. Taylor, Villa Grove, Ill.; Milton Tepfer, Brooklyn, N. Y.; Marshall B. Tucker, Claypool; Harvey E. White, Indianapolis; Elmer Zweig, Fort Wayne.

Doctor of Dental Surgery: Ralph C. Ambrose, Anderson; Alex E. Bardowski, Gary; Horace Beaver, Indianapolis; Samuel L. Border, Warsaw; Drexell A. Boyd, Greencastle; Seymon L. Brodsky, Dayton, Ohio; Ralph R. Bush, Newcastle; William R. Cain, Milan; Cecil S. Cohen, Indianapolis; Chelcia B. Ferguson, Oakland City; John E. Ford, Oakland City; George F. Henricks, Huntington; Sidney Herman, Brooklyn, N. Y.; Fred A. Hohlt, Indianapolis; Howard L. Imboden, Dayton, Ohio; Harold S. Jones, Indianapolis; Charles P. Kauffman, Indianapolis; John T. Kensill, Elkhart; Everett V. McKee, Carey, Ohio; Robert R. Martin, Charleston, W. Va.; Thomas W. Mayne, Ironton, Ohio; Zelix S. Messinger, Brooklyn, N. Y.; Ralph J. Miller, Salem; Louis H. Monfort, Indianapolis; Norwin M. Niles, Fort Wayne; Charles D. Parr, Indianapolis; John M. Rudolph, Cleveland, Ohio; Herschel E. Sanders, Louisville, Ky.; Manson S. Shanks, Salem; John V. Siegel, Cincinnati, Ohio; Laurence W. Simons, Kentland; Richard G. Smith, Indianapolis; Dean Van Osdol, Warsaw.

Graduate Nurse: Marydean Aspy, Indianapolis; Leolia Black, Crawfordville; Clarice L. Blasdel, Deputy; Della B. Boerger, Decatur; Mary E. Cox, Elnora; Mary E. Culbertson, Vevay; (Mrs.) Ettie Mae Clark Fisher, Lafayette; Ina B. Hayes, Springport; Martha E. Hughes, Alexandria; Nola M. Kepple, Hammend; Mary O. Kibbey, Fairmount; Mary E. Killian, Lafayette; Stella J. Kirkendall, Greentown; Edith M. Kroegher, Pittsburgh, Pa.; Orpha M. McKee, Abilene, Kan.; Mary N. Peterson, Bloomington; Ruth E. Porter, Fort Wayne; Frances J. Pritchard, Franklin; Virginia G. Ramsey, LaPorte; Frances F. Rector, Ossian; Dorothy L. Shepple, Shelbyville; Kathryn Walker, Palestine, Ill.; Iris E. Wilson, Huron; Lillian S. Worthman, Decatur.

## SOCIETIES AND INSTITUTIONS

ADAMS COUNTY MEDICAL SOCIETY met at the hospital in Decatur, June eighth. Dr. Werner W. Duemling, of Fort Wayne, presented a paper on "Syphilis."

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ALLEN COUNTY MEDICAL SOCIETY members met at the Fort Wayne Country Club, June fifth, for their annual stag golf and dinner party.

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CARROLL COUNTY MEDICAL SOCIETY met at Flora, June eighth, to hear Dr. John McDonald, of Indianapolis, talk on "Differential Diagnosis of Diseases of the Chest."

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CLINTON COUNTY MEDICAL SOCIETY met at the Coulter Hotel, Frankfort, June seventh, for the annual ladies' night meeting. A chicken dinner was served, and the evening was devoted to playing bridge.

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DEARBORN-OHIO COUNTY MEDICAL SOCIETY held its regular monthly meeting, May thirty-first. A business session was held at the office of Dr. E. J. Libbert in Aurora.

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DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY held its annual picnic, June sixth, at Dr. Will C. Moore's cabin, Hickory Crest, near Muncie. Horseshoe, baseball, potato races, swimming and boating were on the afternoon program.

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FLOYD COUNTY MEDICAL SOCIETY met in the Public Library at New Albany, June eighth. Dr. John P. Gentile, of New Albany, read a paper on "Diabetes in Pregnancy."

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FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY members and guests enjoyed the annual Wabash River fish fry at Covington, June fourteenth. Physicians from Fountain, Warren, Parke, Vermillion, Montgomery, and Tippecanoe counties were pres-

ent. After the dinner, Dr. E. V. Hahn, of Indianapolis, presented a paper on "Early Care of Brain Injuries."

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GIBSON COUNTY MEDICAL SOCIETY held a dinner meeting at the Princeton Country Club, May twenty-fourth, and entertained a number of Evansville physicians. Golf was enjoyed in the afternoon.

GIBSON COUNTY MEDICAL SOCIETY members and the Princeton Methodist Hospital staff held their regular monthly meeting at Princeton, June eleventh, with twenty physicians in attendance. Dr. Isadore Raphael, Evansville, presented the principal address, his subject being "Diarrheal Diseases of Children, and Treatment."

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GRANT COUNTY MEDICAL SOCIETY met at the Hotel Spencer, May twenty-second, when Dr. H. H. Wheeler, of Indianapolis, presented a paper on "Gastro-Intestinal Diseases."

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GREENE COUNTY MEDICAL SOCIETY members held a meeting May seventeenth, at the hospital at Linton. Dr. John Warvel, of Indianapolis, was the guest speaker; his subject was "Treatment of Diabetes." There will be no further meetings of this society until September.

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HANCOCK COUNTY MEDICAL SOCIETY held its last summer meeting at the Indiana Reformatory, Pendleton, June fourth. Guides directed the visitors through the institution, and interesting cases were reported by Dr. J. J. Hohner, physician in charge of the reformatory. The next meeting of this society will be held in September.

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HENDRICKS COUNTY MEDICAL SOCIETY met at Danville, May twenty-fifth, with Dr. Norman M. Beatty, of Indianapolis, as the principal speaker. His subject was "The Doctor and Federal Relief." The June meeting was held at Danville on the twenty-second, with Dr. R. C. Ottinger, Indianapolis, as speaker. He discussed the importance of pelvic examinations.

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LAKE COUNTY MEDICAL SOCIETY met at St. Margaret's Hospital, Hammond, June fourteenth. A motion was made and carried to present the State Association with an invitation to hold the 1935 convention in Gary. Dr. B. F. Gumbiner presented a discussion concerning the fee bill in relation to the Federal Transient Bureau, and recited some of the difficulties experienced. A motion was made and adopted, asking that the fee bill for services in re the Federal Transient Bureau (with changes described) be adopted by the society as the minimum fee for all Transient Bureau work. Dr. Edward J. Ochsner, Chicago, presented a discussion of "Compulsory Health Insurance," pointing out that such schemes are visionary and impracticable. Plans for the annual picnic to be held in August are in progress.

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MONROE COUNTY MEDICAL SOCIETY met at Bloomington, May thirty-first. Dr. Robert Moore, of Indianapolis, presented a paper on "Essentials of Hypertension."

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PARKE-VERMILION COUNTY MEDICAL SOCIETY members enjoyed a dinner meeting at Clinton, May twenty-third. Dr. Russell Hippensteel, of Indianapolis, was the guest speaker.

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PORTER COUNTY MEDICAL SOCIETY met at the Lembke Hotel, Valparaiso, May twenty-ninth, to hear Dr. Oliver, of Chicago, discuss "Skin Diseases in General Practice." This meeting was held in conjunction with the meeting of the Tenth District Medical Society.

POSEY COUNTY MEDICAL SOCIETY held a dinner meeting in New Harmony, June seventh, with Dr. Paul Crimm, of Evansville, as principal speaker. He talked about the newer methods of surgery in the cure of tuberculosis. The society went on record as favoring a county endowment of one or more beds for indigent local patients in the Boehne hospital for tuberculosis near Evansville.

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RANDOLPH COUNTY MEDICAL SOCIETY met June eleventh, at Winchester. Case histories were presented by members.

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SHELBY COUNTY MEDICAL SOCIETY members and guests held a picnic, June sixth, near Flat Rock Cave. Swimming and boating were enjoyed and a picnic dinner was served to the seventy-five attendants.

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WABASH COUNTY MEDICAL SOCIETY met at the County Hospital, Wabash, June sixth. Dr. Jewett V. Reed, of Indianapolis, read a paper on "Head Injuries."

## DISTRICT MEETINGS HELD IN MAY AND JUNE

### FIRST DISTRICT

(Report published in June issue.)

#### New Officers

Dr. W. E. Jenkinson, Mount Vernon, president.  
Dr. Minor Miller, Evansville, vice-president.  
Dr. Keith T. Meyer, Evansville, secretary-treasurer.  
Dr. I. C. Barclay, Evansville, counselor.

### SECOND DISTRICT

The Second District Medical Society held its twenty-fourth meeting at Sullivan, June sixth. A business meeting was held at five-thirty, followed by a buffet luncheon. At seven in the evening papers were presented by Dr. O. R. Spiger, Terre Haute, on "Granulocytopenia"; by Dr. W. D. Gatch, Indianapolis, on "The Clinical Value of Recent Additions to Our Knowledge of Intestinal Obstruction," and by Dr. George Bond, Indianapolis, on "Angina Pectoris." Members of the Sullivan County Medical Society were hosts to the seventy-six guests and members present.

#### New Officers

President to be elected by Knox County Society.  
Secretary: Dr. J. S. Brown, Carlisle.  
Next meeting: Vincennes. Time to be decided by Knox County Society.

J. S. BROWN, M. D., *Secretary.*

### THIRD DISTRICT

(Report published in June issue.)

#### New Officers

Dr. R. B. Smallwood, Bedford, president.  
Dr. Charles B. Emery, vice-president.  
Dr. L. H. Allen, Bedford, secretary.  
Next meeting: Jeffersonville; date to be decided later.

### FOURTH DISTRICT

The annual meeting of the Fourth District Medical Society was held at Batesville, May twenty-fourth. A golf tournament was held at the Hillcrest Country Club in the morning, followed by luncheon at the Margaret-Mary Hospital. Golf prizes were awarded.

The scientific session was held at Osgood in the afternoon, when papers were presented by Dr. R. L. Compton, Dr. W. A. Shuck, Dr. J. F. Treon, Dr. W. H. Stemm, Dr. D. H. Row, Indianapolis, and Dr. L. H. Segar, Indianapolis. During the afternoon, physicians' wives were entertained at the home of Dr. and Mrs. R. L. Compton with a luncheon and bridge.

In the evening a banquet was served at the Methodist Church with seventy-four present. A musical program was given. Dr. E. E. Padgett, Indianapolis, presented a paper on "Medical Economics" and other talks were made by Dr. H. P. Graessle and Mr. Thomas A. Hendricks.



## New Officers

Dr. J. C. Elliott, Guilford, president.  
 Dr. P. C. Bente, Greensburg, vice-president.  
 Dr. E. L. Libbert, Lawrenceburg, secretary.  
 Place and time of next meeting has not been decided.

GEORGE S. ROW, M. D., *Secretary*.

## SIXTH DISTRICT

## New Officers

W. R. Phillips, Glenwood, president.  
 Frank Green, Jr., Rushville, secretary.  
 Samuel Kennedy, Shelbyville, re-elected counselor.  
 Next meeting: Rushville, May 9, 1935.

## NINTH DISTRICT MEDICAL SOCIETY

The Ninth District Medical Society met for the delegates' session at the Clinton County Hospital, at noon, May seven-teenth.

A motion to elect a permanent secretary for the district was indefinitely postponed.

Dr. F. T. Romberger, Lafayette, was unanimously re-elected counselor for the ensuing three years.

An invitation was accepted to hold the 1935 meeting of the district society in Tipton, as guests of the Tipton County Medical Society.

Officers were elected as follows:

President—Dr. H. B. Shoup, Sharpsville.

Vice-President—Dr. S. M. Cotton, Goldsmith.

Secretary-Treasurer—Dr. R. L. Fullerton, Tipton.

A motion was made and seconded to the effect that x-ray departments of hospitals should be under the direct supervision of duly licensed and qualified physicians.

In the afternoon, a scientific session was called to order at the Frankfort Country Club, and papers were presented by Dr. Ralph G. Carothers, Cincinnati; Dr. Edwin N. Kime, Indianapolis, and Dr. Robert Carothers, Cincinnati.

A banquet for members and their wives was served at the Country Club in the evening, following which Dr. Charles P. Emerson, of Indianapolis, spoke on "Oriental Medicine."

IVAN E. CARLYLE,

*Secretary, Ninth District.*

## TENTH DISTRICT

The spring meeting of the Tenth District Medical Society was held May twenty-ninth, at the Hotel Lembke, in Valparaiso, with the Porter County Society as hosts.

Dr. Edward A. Oliver, Chicago, presented a paper on "Diagnosis and Treatment of Some of the Commoner Skin Diseases," illustrating his talk with lantern slides. Dr. DeWitt, who handled the projector, was credited with managing the slides so that they were shown at the right time, in the right place, and right-side-up. Dr. Oliver conducted a question box following the presentation of his subject.

A fall meeting of this district society will be held in Gary, date to be decided later.

N. K. FORSTER, M. D., *Secretary*.

## ELEVENTH DISTRICT

The spring meeting of the Eleventh District Medical Society met at Kokomo, May sixteenth, with a skin clinic in the forenoon, conducted by Dr. Edward A. Oliver, of Chicago, and in the afternoon papers presented by Drs. J. E. Yarling, Dr. A. L. Harter (dentist), Dr. Donald P. Abbott, Chicago, and Dr. H. Allison Miller, Marion.

A bridge tea for the ladies was given in the afternoon at the Elks Club.

In the evening, dinner was served at the Masonic Temple, and Honorable Clarence Manion, professor of Law from the University of Notre Dame, was the principal speaker.

## New Officers

Dr. W. W. Holmes, Logansport, president.

Dr. O. G. Brubaker, North Manchester, re-elected secretary-treasurer.

Next meeting: Logansport, October 17, 1934.

We still hold to our motto, "The Best District Association in the State."

O. G. BRUBAKER, M. D., *Secretary*.

## TWELFTH DISTRICT

The meeting of the Twelfth District Society was held at Potowatomi Inn, Lake James, May twenty-fourth.

At four o'clock in the afternoon a clinical meeting was conducted, with Drs. B. M. Edlavitch, Fort Wayne, discussing "Primary Carcinoma of the Lung." Dr. B. W. Rhamy, Fort Wayne, talked on "The Significance of the Schilling Blood Count." Dr. D. F. Cameron, Fort Wayne, discussed medical licensure in Indiana by reciprocity, and Dr. A. J. Sparks, Fort Wayne, talked on "Bilateral Polycystic Kidneys."

A business meeting was held, with election of officers, as follows:

Dr. F. W. Black, Ligonier, president.

Dr. W. W. Swarts, Auburn, vice-president.

Dr. A. J. Sparks, Fort Wayne, re-elected secretary-treasurer.

Dr. E. M. VanBuskirk, Fort Wayne, re-elected counselor.

Dinner at six-thirty was for members and their wives. After dinner, Dr. Charles P. Emerson, Indianapolis, spoke on "Medicine in the Orient," and Dr. J. H. Weinstein, Terre Haute, past president of the State Association, discussed some of the things in which every doctor should be vitally interested.

Time and place of the next meeting were not decided upon.

A. J. SPARKS, M. D., *Secretary*.

THE INDIANA STATE MEDICAL ASSOCIATION  
EXECUTIVE COMMITTEE

May 13, 1934.

Meeting called to order at 2:00 p. m.

Roll call showed the following present: W. H. Kennedy, M. D., chairman; H. H. Wheeler, M. D., E. E. Padgett, M. D., O. O. Alexander, M. D., W. J. Leach, M. D., Albert Stump, attorney, and T. A. Hendricks, executive secretary.

Minutes of the meeting of March 25 approved.

## Membership Report

Number of members on May 12, 1933.....2,408

Number of members on May 12, 1934.....2,567

Gain over last year..... 159

Number of members on December 31, 1933.....2,711

## Actions Left Over from 1933 Session, French Lick

(1) Codification of Constitution and By-Laws. The preliminary report of the Codification Committee and the first draft prepared by Dr. Alexander Cavins and Dr. J. H. Weinstein brought to the attention of the committee. The committee suggested that this draft as prepared at present be turned over to Albert Stump for a check and study.

(a) Suggestion made that something be said giving district societies official standing in the State Association. The Executive Committee thought that this might be worthwhile.

(b) Suggestion made that rules of the State Association relative to local county medical societies be clarified.

(c) Suggestion made that each county medical society should draw up its own constitution and by-laws and submit a copy to the state headquarters office.

(2) No report as yet upon Dr. Weinstein's recommendation in regard to the university hospitals. Dr. Jett and Dr. Crockett on committee.

Suggestion made that search be made through records, charter, and other sources in regard to the legal status of pay beds in the Long and Coleman hospitals. It is understood that there are no pay beds at the Riley Hospital. This suggestion is to be placed before the Public Relations Committee of the State Association which made a report upon the university hospitals last year.

## 1934 Annual Session in Indianapolis

(1) All speakers for the general sessions have accepted as follows:

David W. MacKenzie, M. D., Montreal; Isidor S. Ravdin, M. D., Philadelphia; Robert A. Strong, M. D., New Orleans;

Emil Novak, M. D., Baltimore; Lucius E. Burch, M. D., Nashville, Tenn.; Ralph A. Fenton, M. D., Portland, Oregon; George R. Minot, M. D., Boston; Walter M. Simpson, M. D., Dayton; Frederick G. Banting, M. D., Toronto, and Frank H. Lahey, M. D., Boston.

The banquet speaker is yet to be selected.

Preliminary programs of the Ear, Eye, Nose and Throat and the Surgical Sections received.

(2) Suggestion made by Dr. Jett that moving pictures be taken at the annual sessions of the State Association. These pictures are to be kept as a part of the historical material of the Association and should be taken on films that will not deteriorate. Suggestion made that the secretary write to Dr. Charles Wyeth, of Terre Haute, who has taken such pictures of the Vigo County Medical Society members, in regard to costs and other details.

(3) The hospital, nurses', and dental associations will be asked to send representatives to the annual meeting in October.

(4) A meeting of the state medical librarians is to be held in connection with the State Association meeting and the librarians desire a speaker.

#### *American Medical Association Meeting at Cleveland, June 11 to 15*

(1) Secretary instructed to attend this meeting.

(2) It is recommended that attempts be made to see that Indiana receives some recognition on the American Medical Association committees for this coming year.

(3) Official call to officers, fellows and members of the American Medical Association for the meeting brought to the attention of the committee.

#### *Transient Indigent Bureau*

Mr. Dwight Ritter and Mr. Paul Moore appeared before the committee and outlined a plan whereby two camps, the Morgan-Monroe County and the Jasper-Pulaski County camps, were to be established. These camps eventually are to take care of 1,400 men between them. Mr. Ritter and Mr. Moore said that the Bureau desired to make arrangements for the medical care of the men in the camps. They wanted the help and advice of the Executive Committee in arranging for medical services in these camps. Following a discussion of the situation Mr. Moore and Mr. Ritter said that the Bureau desired to rectify and correct any misunderstandings that the medical profession might have had in the past concerning the attitude of the Bureau in regard to the cooperation of the medical profession with the Bureau.

Arrangements have been made for transient shelters in Indianapolis, South Bend, Elkhart, Terre Haute, Muncie, Evansville, Richmond, Fort Wayne and Gary. The executive secretary was instructed by the committee to send a notice to the secretaries in each of these counties where the Transient Service Bureau has or is contemplating the establishment of shelters. This notice is to carry the information in regard to the meeting between Mr. Moore and Mr. Ritter and the members of the Executive Committee and the suggestions that have resulted from this conference. During the conference the representatives of the Bureau stated that Mr. Philip Lutz, attorney-general, had given the opinion that the trustees are compelled to pay the hospital bill for transients, while the federal government was able to pay the bill for medical services.

#### *Group Hospitalization*

The so-called "New Deal Program" of the Methodist Hospital brought to the attention of the committee. The committee felt that there is no action to be taken at this time.

#### *Legislature*

Questionnaires on candidates to be sent to the various legislative committeemen.

#### *Court Decision on Vaccination*

Clipping from the *Union City Times* given to Albert Stump who is to get the decision and write it up for THE JOURNAL.

#### *Undertakers' Preference Legislation*

Bill passed at the last session of the legislature which gives the undertaker an additional preference over the physician in collecting bills in cases where there are no dependents. Report upon this to be made by Albert Stump.

#### *Payment for Medical Services Rendered Indigents in Cases of Syphilis*

According to official statements of Dr. Verne K. Harvey, director of the State Division of Public Health, and of William H. Book, director of the Governor's Commission on Unemployment Relief, the expense of any necessary steps to prevent the spread of communicable disease should be borne out of the city or county health funds.

#### *Representative for Illinois State Medical Society Meeting*

Dr. F. S. Crockett, past president, was appointed to represent the Indiana State Medical Association at the annual meeting of the Illinois State Medical Society May 15, 16 and 17.

#### *Letter from State Division of Public Health*

Letter of appreciation received from Dr. Verne K. Harvey, director of the Division of Public Health, for services rendered by the physicians who were members of a special committee appointed by the State Medical Association to prepare a brochure on the treatment of gonorrhea and syphilis which was recently published by the Division of Public Health.

#### *Honorary Membership*

Letter received from Dr. G. W. Finley, Brazil, asking the question as to whether a physician who is eligible to honorary membership in the State Association could receive medical defense from the Association by paying the 75c which is allotted annually from the \$7.00 dues for carrying on malpractice defense. It was the opinion of the Executive Committee that under the present Constitution and By-Laws a physician is either an honorary member or a regular member and must pay the full \$7.00 dues to be eligible for malpractice defense.

#### *Indigent Sick*

(1) Clipping from Kosciusko County paper telling of agreement of the Kosciusko County Medical Society and the county trustees brought to the attention of the committee.

(2) Letter received from physician of Spencer, Indiana, Owen County. Secretary instructed to deal through the county medical society.

#### *Diphtheria Immunization Campaign*

Complications reported from Clark County.

#### *Memorial Dinner, Riley Hospital, May 18*

Members of Executive Committee invited to attend this dinner.

#### *Establishment of State Clinics for Mental Hygiene Cases*

Dr. Max Bahr, superintendent of the Central State Hospital at Indianapolis, appeared before the committee and outlined a plan for the establishment of diagnostic clinics by state hospitals. Dr. Bahr was asked to present a brief in regard to this plan for members of the committee, and the secretary was instructed to refer this matter to the members of the Committee on Mental Health of the State Association with a request that recommendations be prepared by the Committee on Mental Health after consulting with physicians in this line of work throughout the state, these recommendations to be presented at the June meeting of the Executive Committee.

#### *Indiana Plan of Health Coordination*

Diagrams of the Indiana plan of health coordination presented to the Executive Committee. This plan is to be a feature of the exhibit of the Indiana Division of Public Health at the annual meeting of the American Medical Association at Cleveland.



INDIANA STATE MEDICAL ASSOCIATION  
BUREAU OF PUBLICITY

May 3, 1934.

Meeting called to order at 3:30 p. m.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D., J. H. Stygall, M. D., and T. A. Hendricks, executive secretary.

Release for publication in Saturday papers, May twelfth, "Indiana Mothers," read and approved by the Bureau. Final approval of this release is to be received from the chairman on maternal welfare of the Indiana University Coordinating Committee of the State Department on Child Health and Maternal Welfare.

Radio release: Saturday, April twenty-first, "Keep Your Eye on the Ball."

The Committee on Child Health of the Indianapolis Medical Society arranged, through the secretary of the Bureau, for five-minute radio talks for the week of April twenty-eighth through May fourth. Physician's name not to be announced.

Report on medical meeting:  
April 4—Shelby County Medical Society, Shelbyville, Ind. "Internal Medicine."

Requests for speakers:  
May 1—Kiwanis Club, Greensburg, Ind.  
May 8—Portland Kiwanis Club; Portland High School; Portland Rotary Club, Portland, Ind. Speaker requested to talk on "Child Health."  
May 29—Rotary Club, Mitchell, Ind. Speaker requested to talk upon "Heart."

List of speakers received from the various county medical societies whose services may be available for making talks.

Pictures of past presidents are being collected by the historian. The secretary was instructed to ask the historian to attend the next meeting of the Bureau.

Copy of the Indiana Parent-Teacher Bulletin containing an article prepared by an Indiana physician who is not in private practice brought to the attention of the Bureau.

Request received from the editor of *The Citizen* of Portland, Indiana, to be placed upon the mailing list of the Bureau. The secretary was instructed to place this name on the Bureau's list.

Request received from the Wayne County (Ohio) Medical Society to use the Bureau of Publicity releases approved by the Bureau.

REPORT OF HEALTH SURVEY OF LAKE COUNTY  
CHILDREN DIRECTED BY COUNTY COM-  
MISSIONER OF HEALTH

(The following material is condensed from an extensive report received from Dr. William D. Weis, Lake County Health Commissioner.)

A health survey started in Lake County in the early part of January, 1934, ended April 20, 1934, and had as its objectives, first, the immunizing against diphtheria and smallpox of children between the ages of six months and ten years; second, the physical examination of all school children attending the rural and small town schools in the county; third, assisting in the correcting of physical defects found among the school children; fourth, the determination of the causes of failures in school work among the "lower ten" class of school children. Territory within the cities of Hammond, Whiting, East Chicago and Gary was omitted.

In making the survey one nurse started work on January 2, 1934; one started January 4, 1934; three started January 13, 1934; two started January 10, 1934. One nurse was absent for five days. A number of practicing physicians, internes and nurses assisted in the work of immunizing the children.

The total number of children examined was 4,041, of which number 2,061 were males, 1,980 females.

Defective eyes were found in 480, defective ears in 20, nose obstructions in 83, defective throats in 671, teeth defects in 881, skin defects in 14.

One thousand five hundred and fifty-three children had been immunized against diphtheria and 1,956 already had been vaccinated against smallpox.

Children given diphtheria toxoid immunization numbered 2,918, and those given smallpox immunization numbered 2,350.

A check of those having had various diseases disclosed the fact that 104 had had pneumonia, 69 diphtheria, 33 rheumatism, 38 smallpox, 331 scarlet fever, 248 tonsillitis, 1,727 measles, 100 chickenpox and 1,214 whooping cough.

The number of individuals contacted in this survey numbered 6,250.

The commissioned points out that this survey was not a complete one, and it ended on April twentieth only because on that date the assignment of nurses under the Governor's Unemployment Relief Commission was terminated.

The number of defects found proves the need for continuing a service to carry on measures of relief. The report emphasizes the vastness of the necessary work that can and should be done for those least able to help themselves, though it was pointed out that the physical defects were not found among the children of the poor only.

BOOK REVIEWS

BOOKS RECEIVED

THE ESSENTIALS OF PHYSICAL DIAGNOSIS: By Robert W. Buck, M. D., Assistant Professor of Preventive Medicine and Instructor in Physical Diagnosis, Tufts College Medical School; Physician to Boston Dispensary. 259 pages with 21 illustrations. W. B. Saunders Company, Philadelphia and London, 1934. Cloth, \$3.00 net.

MODERN CLINICAL SYPHILOLOGY: By John H. Stokes, M. D., Duhring Professor of Dermatology and Syphilology, University of Pennsylvania; Member, Commission on Syphilis and Cognate Diseases, League of Nations Health Organization. Second edition, revised and entirely reset. 1,400 pages with 973 illustrations and text figures. W. B. Saunders Company, Philadelphia and London, 1934. Cloth, \$12.00 net.

THE COLLECTED PAPERS OF THE MAYO CLINIC AND THE MAYO FOUNDATION: Volume XXV (Papers of 1933—Published 1934). Edited by Mrs. Maud H. McIlsh-Wilson and Richard M. Hewitt, B. A., M. A., M. D. Octavo of 1,230 pages with 210 illustrations. W. B. Saunders Company, Philadelphia and London, 1934. Cloth, \$11.50 net.

INDIANA STATE DIVISION OF PUBLIC HEALTH  
BUREAU OF COMMUNICABLE DISEASES

Monthly Report, May, 1934

Diseases	May 1934	Apr. 1934	Mch. 1934	May 1933	May 1932
Tuberculosis .....	150	84	124	59	178
Chickenpox .....	183	395	375	460	389
Measles .....	5,036	3,953	3,803	1,173	602
Scarlet Fever .....	461	721	1,599	431	369
Smallpox .....	8	2	7	4	31
Typhoid Fever .....	21	28	14	29	8
Whooping Cough .....	266	413	299	91	356
Diphtheria .....	48	68	83	65	91
Influenza .....	56	73	202	94	89
Pneumonia .....	16	31	49	23	36
Mumps .....	53	50	75	169	729
Poliomyelitis .....	4	1	1	9	0
Meningitis .....	3	6	8	10	18
Encephalitis Lethargica...	1	0	0	0	0

THURMAN B. RICE, M. D., Director.

ANNUAL REPRINT OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION FOR 1933. Cloth. Price, postpaid, \$1.00. Pp. 188. Chicago: American Medical Association.

NEW AND NONOFFICIAL REMEDIES, 1934, containing descriptions of the articles which stood accepted by the Council on Pharmacy and Chemistry of the American Medical Association on Jan. 1, 1934. Cloth. Price, postpaid, \$1.50. Pp. 510; lx. Chicago: American Medical Association.

#### BOOK REVIEWS

CORRECTIVE PHYSICAL EDUCATION: By Josephine Rathbone, M. A., Instructor in physical education, Teachers College, Columbia University, New York City. 292 pages with 153 illustrations. W. B. Saunders Co., Philadelphia and London, 1934. Cloth, \$2.50 net.

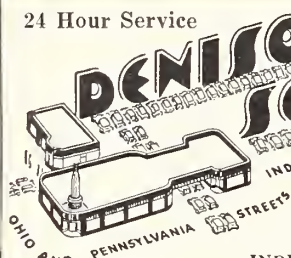
This small, compact volume has chapters on the anatomic and physiologic properties of the human body as a basis for normal and abnormal development, posture, and traumatic deformities. From the corrective viewpoint it largely devotes itself to the gymnastic side of physical therapy.

A chapter devoted to the relation of physical development to the emotional life is particularly valuable.

Corrective exercise as it applies to post-traumatic deformities is only touched. The discussion of the very common pedal pains and disabilities is worthwhile.

A well written, compact, and practical text, with an extensive glossary and bibliography, makes this a valuable textbook or reference for the teacher or student of physical education. For physicians much of the material is superfluous, and the valuable material incomplete.

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# THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

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AUGUST, 1934

NUMBER 8

## ORIGINAL ARTICLES

### NEWER ASPECTS OF RADIOTHERAPY

WITH SPECIAL REFERENCE TO CARCINOMA  
OF BREAST

LESTER A. SMITH, M. D.  
INDIANAPOLIS

While irradiation has long been of accepted value in the treatment of malignancy, too little attention is paid by the average physician to type, quality and effectiveness of the radiations to be applied. Statistics bearing upon its value are ordinarily based upon methods demonstrably less efficient than those of the present day. An appreciation of its underlying fundamentals is of the greatest importance to the non-radiological physician if he is to understand its possibilities and the needs in a given case.

First of all, let us bear in mind that radiosensitivity does not necessarily mean a good prognosis. A good primary response is often followed by an early recurrence. The latter is more likely to occur if the irradiation applied is inadequate to sterilize the "mother-cells" of the tumor,<sup>1</sup> although these may be rendered relatively innocuous by less than this dose. To a considerable extent, success will depend upon ability to place uniformly throughout the involved area a dose adequate for sterilization of the malignant tissue with its "mother-cells" without exceeding the tolerance of the normal tissues.

In the light of present-day knowledge, the principles considered as best utilizing the difference in radiosensitivity between normal and malignant cells and the specific selective action of radiation may be listed as follows: (1) Prolongation of treatment period for the total dose and use of small individual doses; (2) increase in total dosage permitted by such prolongation of treatment; (3) use of penetrating, "hard" rays to obtain the maximum biologic effect on malignant tissue with the least possible irritation of normal tissue; (4) utilization of those physical and technical factors permitting the best possible depth dose; and (5) use of in-

terstitial or cavitary radium radiation as an adjunct where indicated.

1. *Prolongation of Treatment Period for the Total Dose.* Perthes,<sup>2</sup> Regaud<sup>3</sup> and many others have proved that tissue cells are more sensitive to radiations during the process of cell division. The response of spermatogonia, for instance, is much the same as that of tumor cells. These "mother-cells" of spermatozoa are destroyed *without perceptible reaction in surrounding tissues* by a smaller total dose acting over a prolonged period than required if the dose is applied within a short interval of time.<sup>3</sup> Although contested by some in theory, even these accept the principle in practice that prolonged irradiation is more effective, more selective in action, than is a single dose. The use of small, fractional dosage naturally accompanies such prolongation of treatment time as a matter of avoiding over-treatment.

2. *Increase in Total Dosage.* An increase is permissible as compared with the limit of toleration when using a single dose, there being a marked increase in tolerance of normal tissues when the total treatment time is prolonged.<sup>4,5,6,7</sup> This increase in dosage adds markedly to the biological effect on malignant tissue. The amount of increase permissible without danger of late sequelae is still a matter of debate, but it has been shown to be high.

3. *Use of Penetrating Rays.* Many hold that the more penetrating the ray the more selective the effect upon a radiosensitive cell; that is, that the margin of radiosensitivity is increased and that there is less of cyto-caustic effect. With the roentgen-ray, this is secured by using a higher voltage or a thicker filter, or both; with radium, by increasing the filter. In either case, increased hardness is obtained at a considerable increase in cost.

The superiority of biological effect of rays generated at voltages of 300,000 to 1,000,000 is questioned by capable workers.<sup>8</sup> This is on trial clinically and experimentally. There are many technical, physical and economic difficulties involved. Several years must necessarily pass before statistics upon this method can be of value.

4. *Physical and Technical Factors Permitting the Best Possible Depth Dose.* In addition to heavy

filtration and high voltage, an increase in distance from the roentgen-ray tube or radium to the skin increases the percentage amount reaching to a given depth as compared with the amount passing through the overlying skin. By utilizing these various factors, a very great increase in depth dose is obtainable, together with whatever increased biological effect may be obtained by the use of the ray of greater penetration. However, this is obtained at a cost of a great increase in treatment time and consequently in attendant expense.

The projection of a greater percentage depth dose into the tissues is of value in some conditions, but in others, as in carcinoma of the breast without intrathoracic extensions, it is of little additional value and may be undesirable. It is a general experience that the lower voltages of about 150,000 peak give better results in the latter condition than higher voltages except in the case of metastases about the brachial plexus or within the thorax.

5. *Use of Interstitial or Cavitory Radiation.* This is not new in principle or practice except in the utilization of some of the above factors, and will not be discussed in detail here.

Although protracted irradiation has long had its advocates,<sup>9</sup> until a comparatively recent date it has usually been considered an established fact that a tumor cell is as much damaged by a radiation dose of short duration as by an equal dose of reasonably prolonged duration. In 1925 Pfahler<sup>20</sup> reported upon his development of the "saturation method," "consisting in the delivery of an erythema dose into the diseased tissue, and then maintaining this effect for a certain time by means of additional smaller doses to correspond to the loss in effect during any given period." This was based upon an idea originally advanced by Kingery.<sup>21</sup> Pfahler showed not only that such successive doses are well tolerated, but that results are better than by the older methods. Treatment is applied over a period of thirty to forty days in all, with a total dosage of two to two and a half times that tolerated well by tissues if given at a single sitting.

In 1928 Coutard<sup>4</sup> of the Curie Institute of Paris reported his proofs that still larger doses of radiation can be tolerated if applied in equal small fractions once or twice daily over an interval of two to three weeks, the connective tissue and blood vessels being relatively little affected, and the epithelium not irreparably, while a greater effect is produced upon the malignant tissue than by any method heretofore used. It seems a radical procedure, however, and is not used much as yet on account of the possibilities of medico-legal complications.

Pfahler's method has proved safe. It greatly widens the difference in both immediate and remote effects between normal and neoplastic tissues. There is less fibrosis and endarteritis than is produced by only a slight increase in the individual full-tolerance dose repeated several times, and a

much greater effect upon malignant cells than by multiple, widely spaced, full doses. This latter effect results from catching these malignant cells in the mitotic stage as they successively reach it. Used in conjunction with a ray sufficiently penetrating to give the desired effect, results are much better than by the old single-dose technique. A personal experience with the method over a five-year interval, based upon treatment of malignancies of various parts of the body plus observations in the clinics of Pfahler and Widmann has convinced the writer of the great value inherent in the method which more than compensates for the extra time, labor and expense involved. It is unfortunate that in practice this principle of division of dose, increase of total dose and prolongation of the treatment period is in general not sufficiently appreciated.

That the factor of frequency of treatment is of extreme importance was shown in personal experience over a year ago in treating a patient with a very painful extension along the ischium from a carcinoma of the vagina which had occurred while the area was being subjected to repeated radium and "saturation" high voltage roentgen-ray treatments. Severity of radiation sickness required that we apply daily only six per cent of a skin erythema dose of highly filtered, high voltage roentgen-rays to the area. Of necessity the daily treatments were discontinued after seventeen days, but there was almost complete relief from pain and a complete disappearance of the ischial extension of the growth, these effects still persisting. We have had similar experiences since that time.

The time factor of various radiation techniques may be illustrated diagrammatically (Fig. 1). In (a), (b) and (c) the first large dose of roentgen-rays may be regarded as essentially the same in each technique. Several days should usually be taken for this. By the older and more commonly followed method (a) irradiation is not repeated until such interval has passed as will permit its being repeated in full, two to four weeks, depending upon intensity, filtration, voltage of current, etc. Some three or four such treatments are applied as a series. If, however, technique (c) is followed, small fractional doses are applied at intervals of three or four days over an interval of thirty or even forty days, each dose being so calculated as to bring the tissues of the entire area back to a point just below complete 100 per cent "saturation," as it is termed by Pfahler. After such a "saturation series" all radiotherapy is suspended for some eight weeks, after which the entire series is repeated if the condition has seemed at all serious. Technique (b) is a compromise with technique (c) with larger fractional doses given at longer intervals for some six weeks. While easier for both patient and radiologist, it is less effective than (c) as is readily demonstrable by the relative clearing effect on the average palpable and visible radiosensitive malignancy.



Prolonged irradiation is more or less helpful in many deep malignancies, but particularly in those types which melt down readily at first under treatment but which are notorious for ultimate recurrence, such as lympho-sarcoma, lympho-epithelioma and embryonal tumors of the type arising from the ovary or testicle. However, it offers great advantages in recurrent or metastatic breast carcinoma; sarcoma of the soft tissues; many neoplasms of the

cient time has now passed to show that the extra time and work required have been amply justified. There are many factors entering into the survival of patients with breast carcinoma. Longevity of untreated patients has been found to average some thirty-four months,<sup>12,13</sup> but in the individual case there is frequently only a short life-span after carcinoma is found. Lee<sup>14</sup> has observed from a wide surgical experience, "We must keep in mind that

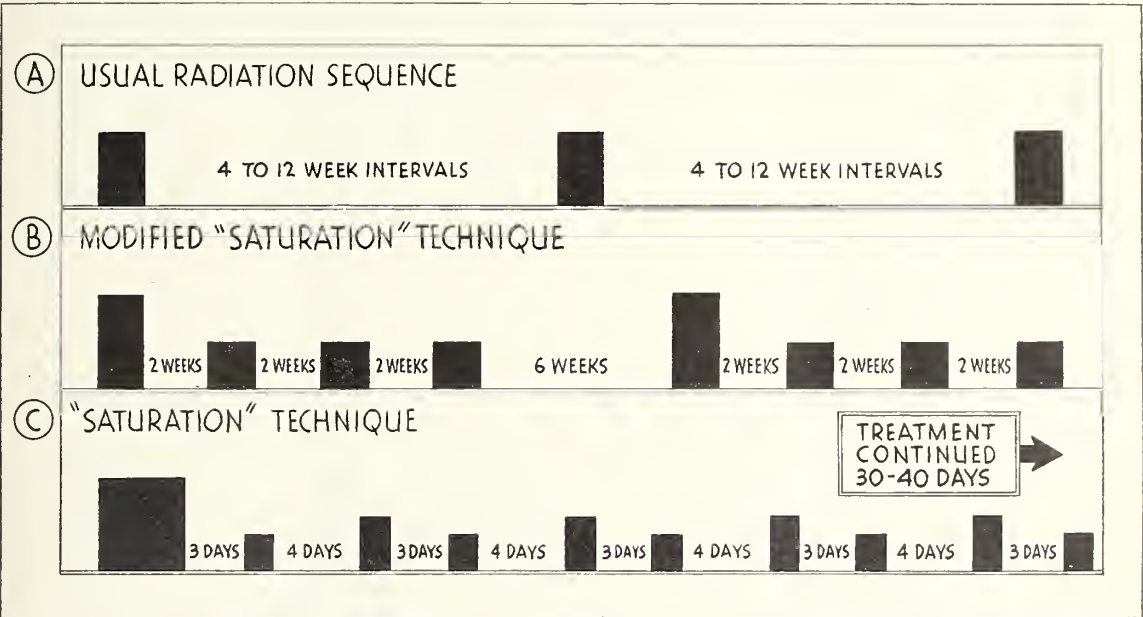


Figure 1. The time factor of various radiation techniques.

mouth and upper air passages (mostly in conjunction with radium or radical surgery); axillary, cervical and inguinal lymph-node carcinomatous metastases in general (often in combination with interstitial radium).

APPLICATION TO CARCINOMA OF THE BREAST

As an outstanding example, carcinoma of the breast recurrent locally or in axillary or supraclavicular metastasis has given results with prolonged irradiation that have not been equalled by the older methods in a personal experience of several hundred cases over a period of seventeen years. Unfortunately the patients with mediastinal and pulmonary involvement have not reacted so well in proportion. External applications of radium over localized extensions are at time combined with the roentgen rays, but Pfahler<sup>12,15</sup> has not found that the routine use of radium in carcinoma of the breast has improved the results as compared with the use of the latter. After witnessing the disappearance of extensive recurrences in a number of instances, use of prolonged roentgen therapy was begun in the case of patients referred for post-operative treatment who we knew had lymphatic extensions and where possible in all post-operative patients of thirty-five years of age or under. Suf-

carcinoma of the breast represents a group of diseases. In one type it is highly malignant and the whole story will be ended in a few months. In another type, particularly in older women, it drags along for years and years." Pfahler and Parry<sup>15</sup> have well tabulated factors affecting the results of operation and radiation treatment of breast cancer as follows: (1) Extent of disease; (2) type of malignancy; (3) rapidity of growth; (4) age of patient; (5) extent of metastases; (6) regions invaded; (7) physical condition of patient; (8) duration of symptoms before operation or of recurrence before radiation is begun; (9) time interval between operation and post-operative treatment. Ewing<sup>1</sup> notes further the decrease in tumor radiosensitivity brought about by the following factors: Fat in tumor bed; syphilitic or local pyogenic infection; decrease in vascularity from any cause; effect of successive irradiations with inadequate dosage; anemia and cachexia of patient, which is the ultimate deciding factor. While surgical statistics on unirradiated carcinoma of the breast are surprisingly variable,<sup>16</sup> they show a great difference between patients with localized tumors (50 per cent to 80 per cent five-year cures) and those with slight to moderate axillary extensions (20 per cent to 24.5 per cent five-year cures).<sup>12,16</sup> With involvement high in the

axilla the five-year average drops to a negligible percentage (5 per cent<sup>16</sup> to 10 per cent<sup>17</sup>). Ewing has been quoted<sup>18</sup> as saying that only one out of twenty-five women escapes recurrence after a radical breast operation undertaken after the axillary nodes are involved. Portmann<sup>20</sup> of the Cleveland Clinic says that 95 per cent of patients with breast cancer have axillary involvement when they come to the surgeon.

The rapidity of development of knowledge in radiation therapy and of its equipment have not made for a fixed, standard technique, and radiation statistics are based upon much less efficient techniques than are known today. Pre-operative irradiation, while demonstrated clinically and experimentally to be of great value, has not been widely used except in advanced cases and reduction of the mortality by such means is not well established by statistics in the group with slighter involvement. Post-operative irradiation has not seemed to be of great value in cases with involvement limited clinically and microscopically to the breast,<sup>21</sup> although Pfahler and Parry<sup>15</sup> report a 93 per cent five-year survival in this group treated by operation plus their most thorough-going irradiation. As regards statistics, one must recognize that there is an appreciable percentage who have had distant extensions before operation, although it is a common experience that in this group that type of patient is more frequently sent for post-operative therapy in which regional recurrence is considered to be more probable than in the average.

In a summary of the literature<sup>22</sup> it is found that in the group with axillary involvement the five-year cures effected by adding post-operative irradiation to radical surgery rise to an average of 37 per cent (Pfahler<sup>23</sup> 55 per cent with "low voltage, variable technique," 73 per cent with "high voltage, saturation technique"). It will be noted that some two to three times as many patients in the late operable stage survive the five-year period in the thoroughly treated, post-operatively irradiated group as in the strictly surgical group.

In the younger age-group results have in general been poor. At the Memorial Hospital of New York only 6 per cent of 306 young women treated by radical amputation survived three years, and only 3 per cent for nine years.<sup>14</sup> In this group in particular post-operative irradiation should be most thorough and painstaking, with careful technique. Here it has been my personal practice to insist upon prolonged and repeated saturation treatment wherever such is possible, except possibly in the aged. The same is true of carcinoma of the male breast, as this is notoriously prone to be very malignant and to extend into distant bones.

In the recurrent group there is no question as to the desirability of irradiation in spite of the very high ultimate mortality. Results will of course vary greatly with differences in location of evident recurrences, but promptness and thoroughness of treatment are essential. Clinical judgment and or-

dinary common sense will determine as to the propriety of subjecting a patient with "inflammatory carcinoma" or advanced carcinomatosis to prolonged treatment. Carcinoma metastatic in the spine may readily be made an exception to the usual rule, however, inasmuch as the remarkably constant results of at least a primary healing warrant an attempt to avert the intolerable pain produced by such an extension.

Radiographic study of the more frequent sites of metastasis is usually desirable as a pre-operative measure. In the average case without demonstrable distant extension we would urge that post-operative irradiation be begun two to three weeks after operation and that this be pushed energetically, within safe limits of tolerance of course, for three to five months. It is of vastly greater importance to the patient that even moderately effective radiotherapy be applied *early* than that the most thorough treatment be given late. Although relatively few patients actually receive such advice from the physicians responsible, the patient should then be kept under observation for several years, best by the family physician with consultation if needed.

The question of relying entirely upon external irradiation frequently arises. It might readily be considered that if the metastases and recurrences are caused to disappear we would reasonably expect the primary tumor to be destroyed also. Such is not the case in fact, however. The primary tumor has a blood supply at least fairly well established, while metastases tend to be less well nourished and are moreover more permeated by the lymphocytic elements which appear to play a large part in the body defense mechanism against cancer and which are conserved by properly applied radiation. It has been shown that the "mother-cells" of a malignancy are more resistant to irradiation than are the metastases, and since the breast can be removed without great risk to life it is the general opinion that the patient is better treated if this is removed, with adjacent muscle and lymphatics if indicated. If a breast tumor is fixed and "inoperable" as generally considered, careful and thorough preliminary irradiation may render it movable and materially reduce its size, after which a limited operation can be performed with greater probability of benefit to the patient and radiotherapy can be continued post-operatively. For the present we may leave the trial of radiation buried in the primary operable breast tumor in the hands of those prepared to investigate thoroughly its value and indications. Excision is desirable also because there is a wide difference in the radiosensitiveness of various breast tumors and the microscopical appearance of the malignancy is a valuable guide to treatment. There may be more question as to the benefits conferred by radical dissection of the axilla in view of statistics quoted above and the known multiplicity of other pathways of dissemination of cancer from the breast.



To summarize the procedure of irradiation, then, we may say that in the present state of our knowledge we preferably first irradiate a breast supposedly malignant, the surgeon operates at an interval of seven to twenty-one days after completion of irradiation and after two to three weeks, post-operative healing being well established and the patient's resistance recovered after operation, post-operative irradiation is instituted. More than one prolonged series is advisable. In actual practice the desirability of pre-operative radiotherapy is seriously affected by the non-cooperative attitude of a certain number of patients who refuse surgical measures when they see appreciable reduction of a tumor mass from such treatment, failing to be convinced that such primary shrinkage does not necessarily imply curability of the primary tumor by this method alone.

## SUMMARY

A very material improvement in results is effected by utilizing in the treatment of most malignancies where radiotherapy is indicated the principle of prolongation of total treatment time, with small individual doses.

The general indications for use of the method are outlined with special reference to breast carcinoma, in which five years' personal experience has shown it to be greatly superior in value to the ordinary method.

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## MODERN PHASES OF NASAL SINUS ABNORMALCY\*

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Sinus abnormalities are aggravated and prolonged by intranasal anatomical deviations and often are the direct result of imperfect drainage resulting from this source. That intranasal imperfections have a direct bearing upon chronic infections in these spaces there can be no doubt, but that an inflammation or infection, acute or chronic, of the sinuses does occur in the nose of fairly normal proportions is beyond question.

Etiological factors other than anatomical have been suggested as bacterial, allergic, endocrine and nutritional. Interpretation of causation should, therefore, comprise the knowledge that internal conditions may be responsible, especially primarily, for many irregularities in the nasal accessory sinuses and that pathological changes in the mucosa lining these cavities are not always local in origin.

For convenience of study the nasal sinuses are grouped as posterior and anterior. The anterior group is comprised of the frontals, maxillaries, and anterior ethmoid cells, the posterior group of the sphenoids and posterior ethmoid cells.

## CLASSIFICATION

Sinus disease is classified as catarrhal, purulent, and hyperplastic. In the study and management of this subject the classification given must be kept in mind. Without definite classification relative to grouping, and without knowledge of causative factors, uncertainties must occur.

As a source of focal infection influencing such conditions as arthritis, neuritis, colitis, vaso-motor rhinitis, choroiditis, retinitis, and the various bronchial, tracheal, laryngeal, and naso-pharyngeal infections, the sinuses are known to be extremely important. The local as well as general manifestations of involvement of these spaces vary according to stage and character of pathology present.

Bearing in mind etiological factors it will be apparent that the term sinusitis as ordinarily em-

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ployed is indefinite. In one instance a medium degree of hyperplasia of the membrane may be significant, in another a greater degree may be inactive and to a certain extent harmless.

Pathological changes in the mucosa of the sinuses unquestionably are present in all subacute and chronic infections. The rhinological summary should determine if such condition is of local origin or influenced by internal conditions mentioned elsewhere. If an endocrine dysfunctioning is shown, or there is food, drug, or other allergic poisoning, a simple curettement of granulation tissue from the nasal sinuses will, it can easily be understood, be very transient in its results. If the sinusitis is of bacterial origin and the cavities are relieved of infected granulations plus proper permanent drainage and vaccines, preferably autogenous, a favorable termination may be anticipated.

Allergic conditions affecting normal balance of health are known to be responsible for many abnormal manifestations in the upper as well as lower respiratory tract and these conditions range from pollen poisoning to drug, food and other sources. The subject of allergy, although admirably conducted at this time, is in the early period of development and it is not improbable that future medical science will demonstrate much of lasting benefit to mankind in the more accurate demonstration of this important problem. That it does have a very great influence on the nasal and throat membranes there can be no doubt and that its influence on normal balance of health is pertinent is generally admitted. Like all comparatively new procedures, however, it is possible that in some instances too much stress has been given the subject by over-enthusiastic workers and eventually, it is believed, a more rational working basis will be attained both in rhinolaryngology and other branches of medicinal and surgical endeavor.

Endocrine dysfunctioning, it will be admitted, is one of the most difficult problems the medical profession of today has to solve, if indeed it can be successfully solved in a very large percentage of instances. The skilled neurologist and the internist know the significance of an inherent gland imbalance which may manifest itself from early mature years to middle life, or even in rare instances, later years. The entire metabolic ratio is, in these individuals, changed and the effect of such condition upon the skin and mucous membranes of the air passages is definite and demonstrable.

Nutritional disorders have a marked effect upon the mucous and other surfaces of the body. This statement is elementary but it is doubtful if in very many instances a careful survey is taken of this important subject by all men engaged in otorhinolaryngologic practice. The skilled pediatrician is adept in handling the undernourished child, especially through correction of hypo-vitaminosis, and the general physician knows that much can be accomplished by raising the standard of health through digestive, assimilative, and eliminative

organs—the ordinary channels nature has for combating invasion of disease-producing micro-organisms. Nutritional disorders, therefore, are responsible for the continuance of many of the inflammatory involvements of the sinuses and it is apparent in what manner this is brought about.

The management of the pathologic sinus is, in general, far too often confined to the removal of nasal structure irregularities, tonsillectomies, suction, irrigations, etc., without proper consideration being given to the general causative effect of the symptoms present. It is believed that many individuals who have protracted sinus involvements should be subjected to routine physical examination on the basis of uncertainty of etiology. It is apparent that cooperation on the part of the internist may enable the rhinologist more accurately to interpret the etiology of the abnormality present and to present a prognosis of greater value. We, of course, are referring to infections and hyperplasias of the nasal sinuses alone and not to new growths or intranasal anatomical deviations encountered in rhinolaryngological practice and best understood by the specialist in this work.

Obviously, the care of sinus infections is not a matter of simple irrigation of the cavities, nor indeed of radical surgical intervention in each and every individual who presents an x-ray showing of hypertrophic or hyperplastic tissue. Many forms of surgery have been devised and done on the nasal accessory sinuses from the time of Killian and others to the present day. It is not improbable that some forms of pathology, formerly regarded as of purely local origin and dealt with radically, may be corrected by less drastic measures and especially through a more accurate understanding and correction of etiological factors.

It is, therefore, believed and generally accepted by leading rhinologists that radical sinus surgery is contraindicated in some conditions formerly thought necessary, and that judicious intranasal surgery will, in many instances, accomplish in the way of drainage all that is required. Many infections formerly considered as of major surgical importance are known to be amenable to drainage, direct or through correction of intranasal structural deviations, or through an understanding of internal factors acting as causative agents.

The sinuses considered separately have problems no two of which are identical. Infections found in the antra suggest the possibility of necrosis of dental origin as well as drainage from the sinuses adjacent to these cavities. A chronic ethmoid or frontal sinus infection may be responsible for pathology in the antral cavity; an ethmoid infection may emanate from pathology in the frontal; etc. The anatomical proximity of these cavities will at once demonstrate the futility of irrigating, aerating or curetting one cavity and ignoring the possible original source of infection.

A chronic ethmoidal infection can only be relieved by partial or complete exenteration of the



cells and a sphenoidal infection is present in practically all chronic posterior ethmoid involvements. This part of the vicious circle, so called, is the most important relative to sequelae of sinusitis.

It is well known that total or partial blindness is not an uncommon accompaniment of chronic infection in the deeper sinuses, and extreme headache is frequently associated with pathological involvement of these spaces. Too much emphasis cannot be given the subject of ethmoiditis and sphenoiditis in relation to retro-ocular vessels and nerves and the effect that such condition may produce upon the organs of sight. It will be understood that in no way is sinus disease as a cause of blindness to be confused with intracranial lesions such as pituitary tumor, brain tumor, or multiple sclerosis. Many forms of mental disturbance are traceable to infection in the posterior sinuses.

The antral cavities are best treated in the average subacute, or even in some instances the chronic, state by making a permanent artificial opening through the inferior meatus. If there is necrotic alveolar bone tissue from dental caries this will not suffice, but the average infection of nasal origin found in these cavities, barring polypoid degenerative changes, very often will become quiescent if given proper drainage and aeration.

The frontal sinuses will, as a rule, in all acute or subacute conditions eventually drain themselves if the region of the infundibulum is patent and this may mean, but not always, an anterior ethmoid exenteration. Catheterization of the frontal sinuses in a large percentage of skulls is a dangerous and even impossible procedure. The anatomical variations in the naso-frontal opening are many and in a rather large number so tortuous that an instrument will not enter. In some forms of infection, therefore, especially the chronic polypoid type, external surgery must be considered.

The nasal septum is certainly not in the median line in most skulls and the matter of resection is one of judgment. A small deflection, high up on the perpendicular plate of the ethmoid, may be the direct cause of reflex nerve disturbance or prevent normal drainage while a greater degree of deflection elsewhere may be insignificant.

Proper nasal functioning is a most important problem. An opening through the nose is of little value if this fact is to be ignored. The function of the nose besides being a sense organ, is to warm, clean, and moisten the inspired air. Deviation from the normal at once defeats this purpose. It follows that this phase of the subject should be given due consideration before attacking surgically any of the intranasal structures involving the mucosa.

The nasal mucous membrane is covered with columnar ciliated epithelium and the same type of epithelium is found in the accessory sinuses. Physiologically this membrane is capable of resisting ordinary forms of infection and functions

in the nose to this end. On this basis, as well as that mentioned before, it will be apparent that when possible to avoid traumatism or destruction of the membrane it should be done.

The normal nasal secretions are composed of mucin which, in inflammation of the membranes, becomes tenacious in character. This secretion, seventy per cent aqueous, represents nature's method of counteracting surface invasion of bacteria. It is, therefore, obvious that to break down this natural resistance is detrimental. Many agents instilled into the nose disseminate infection and prevent localization of inflammatory products. Any irritant applied to the nasal mucous membrane, especially in the acute period, prolongs infection and is harmful not alone to the Schneiderian membrane but reflexly to all the accessory cavities.

Tracheo-bronchial infections, as mentioned before, very often are sequelae of irregularities in the upper respiratory tract and should be considered as emanating from this source in a very great number of instances. Especially does this apply to the posterior sinuses. Nasal sinus abnormalities, structural deviations, and internal conditions acting as causative factors, then become significant relative to general respiratory well being and also as sources of infection involving the lower respiratory tract and the entire body. The character of bacteria present is, plus body resistance, naturally the determining factor relative to symptomatology. One individual, for instance, will tolerate an active micro-organism, another will not. At one period in life toleration is not as at another. These are every day problems and expressed as such.

Simple hypertrophy of the mucous membrane in the sinuses does not, it can be seen, always call for surgical intervention and when so should be considered a problem involving aeration and drainage only. In general, curettement of an antral wall thickening without degenerative changes is equivalent to curetting nasal mucosa. This, of course, is never done and is mentioned as an example only.

Polypoid degeneration in a sinus cavity is quite another matter and requires, very often, radical methods for its relief. But, as stated, the ordinary sinus wall thickening, which is usually continuous with exactly the same state of the entire nasal membrane, will not, it is believed, be benefited by any form of surgical interference except drainage and aeration.

Repeated sinus irrigations are not beneficial except in the very acute purulent involvements. Indeed it is believed that an acute exacerbation of the chronic state is often produced by excessive manipulation. The stronger antiseptic solutions sometimes used in the sinuses are distinctly harmful, as elsewhere in the nasal cavities. Mild saline fluids or non-irritating antiseptics are therefore preferable. Internal medication in the form of drugs of the vaso-constrictor type are very beneficial in acute nasal inflammations including the

sinuses. If nasal applications are to be made direct then some of the hydrocarbon oils or other non-irritating solutions should be used. Vaccines of the autogenous variety are very definitely indicated in many infections of these cavities, especially those of the subacute type without excessive granulation tissue.

In general many of the drugs on the market supplied by legitimate as well as other manufacturers for use in the nose and throat have but little, if any, effect, except transient, on the inflamed mucous membrane. The continued use of those of the vasoconstrictor type can and does result in dilatation of the capillary blood supply and through this source produce harmful effects.

Indiscriminate nasal medication and surgery are to be criticised. It is not improbable that the natural forces which might operate, at least to localize infection, are sometimes broken down and actual harm produced by meddlesome and irrational procedures.

The treatment, then, of nasal infections, including those of the accessory sinuses, is dependent upon etiology and stage of involvement as well as anatomical and other factors. No two instances of nasal or nasal sinus abnormality are identical. No two human beings are precisely the same. The subject, therefore, is a part, and an important part, of the general scheme of physical diagnosis.

Nasal sinus abnormalities are amenable to treatment. The important consideration is first and foremost etiology and, second, rational management. The treatment of these affections may be quite as accurate as that of any other form of disease or variation from the normal.

Management of diseases of the nose and throat is a problem of far more importance than mere mechanical manipulation or a few formulas for topical application. Viewed on the facts outlined, rhinology assumes its proper place in the medical and surgical fields.

Summarizing the statements made, it will be apparent the intention is to suggest a closer working organization between the internist and rhinologist. It is believed that few healthy persons who live in proper atmospheric surroundings and who have normally functioning nasal cavities will be found with sinus pathology of consequence.

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## PRIMARY CANCER OF THE LUNG

WITH REPORT OF A CASE IN A BOY AGED TEN

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Under the term "phthisis cancerosa," Bayle<sup>1</sup> first reported the occurrence of cancer of the lung in three cases. Laennec<sup>2</sup> in 1819 led a group of men who described "encaphaloid" of the lung but he was not able to diagnose it ante mortem. Walsche<sup>3</sup> in 1843 called it by the name cancer.

In the same year Köhler<sup>4</sup> in Germany wrote a monograph on the subject. Bell<sup>5</sup> first diagnosed pulmonary cancer in life from the symptoms of cough, dyspnoea, pain and stridor and verified it by autopsy. Stokes<sup>6</sup> first diagnosed it by physical examination and gave a complete description of its clinical manifestations. In 1863 Virchow<sup>7</sup> described the pathological process of pulmonary tumors, including cancer of the lung, although it was his opinion that primary cancers were rare. As a student of pathology under Dr. H. G. Wells twenty-five years ago, I was taught that primary bronchial cancer was so rare that it need not be considered in the differential diagnosis of diseases of the chest. Recently, however, this same authority<sup>8</sup> has written, "There seems to be little doubt that primary cancer of the lung is now a more common disease in Europe and America than it was ten or fifteen years ago." In Erdheim's pathological clinic in Vienna during 1929, I was astonished at the frequency of primary bronchial cancer coming to the autopsy table. According to Kikuth,<sup>9</sup> whose necropsy material extended over a period of thirty-five years (1889-1923), primary cancer of the lung represented 9.5% of all the cases of cancer in the pathological institute in Hamburg, and in 1923 lung cancer ranked second among the visceral neoplasms, being one-third as common as cancer of the stomach. Recently there has been reported an increase in lung cancer to a figure approaching 2% of all patients coming to autopsy. While in 1918 McMahon and Carman<sup>10</sup> stated that there were only 428 authentic reports, there are at present several thousand cases on record. Hruby and Sweany<sup>11</sup> have collected a vast array of statistics which show that there was an increased incidence of cancer of the lung greater than the incidence of general cancer until the war; then after a slight depression, there was a tremendous rise, the peak being reached in 1928, and which amounted to a ten fold increase. Weller<sup>12</sup> also expressed a similar view when he said, "No other form of neoplastic disease is more intriguing from the standpoint of incidence than primary cancer of the lung, for within a generation it appears to have become one of the common forms of malignant disease instead of the rarity which it was believed to be at the beginning of the century." It is quite obvious then, that this condition is today a major diagnostic problem, and will probably increase rapidly in importance.

As to etiology, the only definite thing is that the cause seems to be similar to that of cancer elsewhere. There is in all probability an inheritable intrinsic predisposition which may be activated by a variety of chronic irritative factors. The large incidence of lung cancer in the Schneeberg miners would suggest chronic irritation as a cause, inasmuch as the cobalt dust has been shown to be radioactive. Kikuth was much impressed by the case of a young man aged 39, previously healthy, who died of bronchial carcinoma fourteen months



after going to work in a chemical factory in which he was exposed to heavy fumes containing dichlorethylene, trichlorethylene, pentachlorethane and hexachlorethane. The gassing of men in the war has also been considered a factor in increasing the incidence. It has been claimed that automobile gas, smoke, irritating dust and tar on the roads are contributing factors and a direct cause for the great increase in the disease. Trauma may occasionally be a causative factor as in the case reported by Wells and Cannon,<sup>13</sup> where a primary lung cancer developed in the periphery of the left upper lobe eleven months after a demonstrated traumatism to that region, which produced hemoptysis and diffuse subcutaneous emphysema. It is questionable if occupation plays a very important role in the etiology, aside from the environment of irritating dust and chemical gases as quoted above.

The effect of chronic pulmonary disease often seems to be closely related to lung cancer. The sequelae of influenza insofar as they bring about bronchiectasis or chronic fibroid pneumonia, are of especial importance. As regards tuberculosis, Kikuth felt that it plays a small role, if any, in determining a malignant pulmonary condition, occupying in this respect exactly the same position as a considerable number of other chronic inflammatory diseases. Weller<sup>12</sup> is of the same opinion. Norris and Landis<sup>14</sup> feel that malignant disease and tuberculosis rarely coexist, having seen but one such case.

Primary cancer of the lung occurs about three times as frequently in males as females. While there are on record cases as young as 7, 18 and 19 years of age, 95% occur after thirty and the average age is close to 50. In Cooper's<sup>15</sup> experience the Hebrew race has been especially susceptible.

There is a considerable difference of opinion as to the pathological classification of lung cancers and I do not care to go into this phase of the subject, except as to give a definite idea of the clinical picture. Most of these cancers are bronchiogenic in origin, Weller placing the ratio as high as 10 to 1. Two general types may be recognized:

1. Those with an isolated tumor formation;
2. Those presenting an infiltrating form closely resembling a dense tuberculous infiltration.

As regards location, it seems that the right lung is involved more often than the left; as to lobar distribution, the right upper lobe is slightly more frequently involved than any other single lobe.

Metastasis may occur early or late, and probably depends upon the growth of the tumor into the pulmonary vein according to Hruby and Sweany.<sup>11</sup> In Fried's<sup>16</sup> series 30% metastasized to the central nervous system. Rogers<sup>17</sup> states that carcinoma of the lung should be classified with that of the breast, thyroid, prostate and suprarenal as showing a very early tendency toward metastasis to bone. Secondary growths are also frequently found in the pleura, lymph nodes, liver and kidneys.

The clinical picture shows an insidious onset, with cough which at first is dry, later becoming productive. Dyspnoea is usually present and at times cyanosis. The expectoration has been described as currant jelly because of its being gelatinous in character and streaked with blood. It may, however, be mucopurulent and very offensive. Pain in the chest is generally present especially if the pleura becomes involved. Constitutional symptoms of loss of weight and fever of a septic type, depending on the degree of secondary infection, are observed as a rule. Various pressure symptoms pointing to a mediastinal involvement may develop from metastases in the mediastinum.

The signs elicited by physical examination are often negligible and not at all characteristic. If a bronchus is occluded the signs of atelectasis of the part of the lung supplied by that bronchus may be found. A bronchiectatic cavity may develop as a result of secondary infection above the occluded area. With suspicious signs of fluid a diagnostic thoracentesis is indicated and the presence of bloody fluid is very suggestive of a malignancy. Occasionally the cancer cells have been found in the pleuritic exudate. The sputum examination rarely shows fragments of tissue, but the persistent absence of tubercle bacilli should immediately suggest the possibility of cancer. X-ray examination can be of great help in the diagnosis when interpreted by a competent radiologist. Bronchoscopic examination is usually definite especially in the early bronchial type and diagnosis can be proved by biopsy.

In the differential diagnosis, it is probable that tuberculosis and lung abscess are most commonly confused with cancer. In bronchiectasis the history is usually of much longer standing and the findings often bilateral. Syphilis of the lung is rare, and I have been told that in the service at Ann Arbor, there has never been a proven case of syphilis of the lung at the autopsy table. Benign tumors and cysts give a history of long standing without progression and the roentgenologic findings are characteristic, namely, single clean-cut lesions remaining the same size on repeated examinations. Mediastinal tumors and aneurysms can usually be differentiated on the physical findings and fluoroscopic studies.

The course of the disease is usually rapidly fatal with death occurring within a few weeks or months of the onset of the symptoms. In a few instances it seems fairly clear that the condition existed for as long as three or four years after the appearances of the initial symptoms.

Treatment will depend upon how early we are able to make the diagnosis. As in all cases of cancer, the chances for successful treatment depends on early recognition of the disease. In the very early cases the work of Kernan,<sup>18</sup> where he removes the lesion through the bronchoscope and implants radon, offers some chance of success, but in the big group of cases which are further advanced, surgery is the only method of treatment.

Lobectomy has been done successfully as far as the immediate operative mortality is concerned and is no longer in the experimental stage. Recently Graham<sup>19</sup> has reported the successful removal of an entire lung for cancer in one stage, and in November, 1933, at Ann Arbor I saw a similar case which had been done by Alexander. Roentgen therapy is of no avail and even questionable as to palliation. In 19 cases so treated by Paterson<sup>20</sup> at the Mayo clinic, all were dead within ten months and all but three within four months. There is not a case of primary lung carcinoma on record which has been successfully treated by x-ray therapy.

Because of the rarity of primary lung cancer in childhood and the confusing clinical picture presented in this patient, the following case is reported:

**History:** Ross M., a boy of 10 years of age, first seen July 27, 1933. One month previously, while running with a piece of timothy grass in his mouth, he thought that he inspired it. He immediately was taken with a rather severe coughing attack, but there was no evidence of having dislodged the grass. Since then he has had an intermittent dry cough. His parents noticed that on least exertion he had dyspnoea and "wheezed." During the past five days he had not felt well, having vomited once and complained of headache, chills and fever, and loss of appetite. His only previous illness had been measles and chickenpox, and the family history was negative for tuberculosis and cancer.

Examination revealed a fairly well nourished boy of 10 years of age who seemed to be quite ill; temperature 101; pulse 84. His usual weight was given as 94 pounds, our weight, 88 pounds. The physical examination revealed impaired resonance with diminished breath sounds over the right lower lobe posteriorly, and was otherwise negative except for enlarged tonsils. The red blood count was 4,790,000 and the hemoglobin 85 (Sahli). The white count was 17,600 with 85% polys. The urine and Kahn tests were negative. The x-ray examination confirmed the physical findings of involvement of the right lower lobe. Our radiologist questioned the tentative diagnosis of an infection from the foreign body and called my attention to the possibility of a malignancy. Dr. Eugene Balson twice performed a bronchoscopy but did not attempt to remove any tissue for fear of starting an uncontrollable hemorrhage.

**Course:** During August and September the temperature ranged from 99.8 to an occasional peak of 102. The appetite, however, remained good and the patient was ambulant. In October he began to show marked evidence of sepsis with an intermittent temperature of 103 daily, rapid pulse and marked sweating. Pain in the right chest became a prominent symptom. The sputum was very profuse, as much as a pint daily, and of a very offensive odor. At no time did we see any blood,

tubercle bacilli, or cancer cells. The x-ray showed an extension of the involvement in the right lower lobe. November 13th the x-ray examination suggested a collection of pus in the pleural cavity and this was verified by puncture. Under local anesthesia a rib was resected and drainage instituted but we did not find as much pus as we had anticipated. The following day the patient suddenly died following a paroxysm of coughing.

**Autopsy:** Upon opening the right chest the entire lower lung was firmly adherent to the parietal pleura and the diaphragm, making the removal of the lung extremely difficult. No abscess cavity in the lung was found and the cut section immediately suggested a new growth. Microscopic examination by Dr. B. W. Rhamy showed a primary carcinoma of the lung grade III, probably bronchogenic in origin.

#### SUMMARY

1. The importance of the rapid increase in primary lung carcinoma is stressed and the fact emphasized that it presents today a major diagnostic problem.

2. A case of primary lung cancer in a boy aged ten is reported, which tentatively we had diagnosed as an infection from the inspiration of a foreign body, but which at autopsy proved to be cancer.

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## BURNS OF THE EYE

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All burns of the eye are potentially dangerous whether of chemical or thermal origin or whether the damage observed at the time of injury seems trivial or severe. Trivial burns frequently assume a very serious aspect because we treat them as trivial, or because of other underlying structural or latent pathological conditions. All burns must be given diligent care. They often challenge our therapeutic and diagnostic resources to overcome the damage and to meet the complications of iridocyclitis, ulceration, glaucoma, perforation, symblepharon, and deformities of the lids.

### CHEMICAL BURNS

It is generally accepted that chemical burns of the cornea and conjunctiva are more destructive than thermal burns. The destructive results of a chemical depend upon its strength, the amount received, the pressure that forces it into the eye, the duration of time before it is removed, and the peculiarity of that particular chemical. The corneal tissues are more highly complex and specialized than the conjunctiva or skin; thereby they suffer more severely a lasting and hopeless transparent tissue loss that is replaced by scar tissue. The intensity of this scar depends upon the depth of the corneal destruction. Should this descend to Descemet's membrane, then light transmission through this area is an impossibility after healing is completed. Etiologically, chemical burns are divided into two groups, the alkali and the acid burns.

Alkali burns are thought to be the more serious. The immediate symptoms are lid oedema, chemosis of the conjunctiva, the clouding of the cornea, which clouding is usually never very dense; later complications may arise such as iridocyclitis and secondary glaucoma. Often our early prognosis is good, but a few days later the cornea sloughs, and we may get a phthisis bulbi, panophthalmitis, or ruptured cornea, the latter if intraocular tension has been increased. Thies,<sup>1</sup> and Pilcher,<sup>2</sup> state that ammonia acts as a base on the living and dead corneal tissue, forming a soluble albuminate which has great toxic power. The water affinity of this chemical extracts fluids from the cornea allowing any remaining alkali to penetrate deeper, thus increasing the destructive process. This accounts for our mistaken early hopeful prognosis. In corneal anesthesia following burns our prognosis should be guarded.

Corneal injuries resulting from acids are pathologically different from alkalis. The corneal albumin is precipitated, and there is no further penetration of the acid into the tissues. This is unlike the alkali injuries in which the process may continue for several days. Delayed acid penetration

is prevented by the scar or the slough formation. Frequently the corneal scars are trivial in these burns for the destructive process is completed in a few moments. Here the burned cornea looks dull and opaque, the extent of the opacity depending upon the depth to which the tissues have been damaged. In the mild cases the cornea is gray, but in the worst ones it is as white as porcelain, dry, lusterless, and often insensitive. In the milder cases frequently the epithelium is replaced without scar tissue intervening which would prevent transmission of light. In extensive and deep burns with marked opacity the entire cornea is necrotic and may herniate and rupture with a resultant panophthalmitis or be replaced by a permanent irregular roughened scar, making a hopelessly blinded eye. The severity of the injury determines in part the ultimate outcome. This severity is dependent upon the kind of acid, its dilution, and the elapsed time until its complete removal.

### CASE REPORTS

The two following cases of acid burns are interesting from the standpoint of contrast. The first, J. M., age 19, received a splash of acid in the right eye. The kind and strength of the acid has not been determined, for  $\text{HNO}_3$  and  $\text{H}_2\text{SO}_4$  were both at his disposal. Initial irrigation of warm sterile water was done soon after injury. The cornea was intensely infiltrated over its outer quadrants extending well over the pupillary area, accompanied by a severe conjunctival injection and chemosis. He was atropinized in anticipation of a secondary iritis. The following day his pain was intense, necessitating hospitalization. The eroded cornea sloughed, leaving two-thirds of its surface denuded. After three or four more days a corneal ulcer developed which was very indolent in its response to the usual therapy. Accompanying this a severe iridocyclitis developed, increasing his symptoms. A moderately dilated pupil had been maintained. These symptoms gradually abated as the ulcer healed which required five weeks of time. Prior to the healing of the ulcer, glaucomatous symptoms appeared. Finger tension revealed a hardened globe. The Schiotz tonometer readings were 48 m.m. Repeated paracentesis was necessary before the eye became quiet. Soon after the first anterior chamber drainage a marked response was noted in the improvement of the ulcer. Fifteen days later tension had fallen to Schiotz 28 and remained between 26 m.m. and 30 m.m. on succeeding days. The ulcer was being replaced by scar tissue with a diminution of all symptoms. It is interesting to note the response of the ulcer to the continued lowering of intraocular tension; however, each paracentesis was accompanied by an immediate severe pain due to sudden lowering of his tension. The intensity of the corneal scar was more marked over the former ulcer site. One year later the opacity had decreased in its intensity, but sufficient only for light perception and projection.

Tension was normal, or 26 m.m. Schiotz. Examination of pupils was not satisfactory.

The contrasting case was C. M., age 32, who received a splash of battery acid in his right eye. There was a moderate steamy opacity or graying of the entire cornea resembling the infiltration of an interstitial keratitis. This epithelium did not slough at any time but absorption occurred within ten days, leaving a clear unscarred cornea whose luster was normal except at the position of 6 o'clock on the limbal margin where a small ulcer had developed. This ulcer responded to the usual therapy and left a very small permanent scar. Vision following complete healing was 20/20 in each eye. A moderate iritis had developed and was easily controlled without any other complications. He was released as recovered twenty-two days after injury.

These two cases are of great interest from the standpoint of: First, the differences in dilutions of the etiological factors resulting in widely separated pathological comparisons; and secondly, complications occurring in one with loss of vision and the comparative freedom from complication in the other with ultimate return to normal vision.

Two cases with similar pathological changes came under my care, both the results of the same accident. The responsible chemical in these cases contained metallic iodine as its basic element. Metallic iodine belongs to the halogen group and is an acid radical. Two men, age 58 and 21, were working around a container filled with the above substance. There was a sudden explosion, both were showered with this expelled chemical and thrown to the floor. This black-brown preparation was "shot" into the skin of their extremities, trunks, faces, ears, and eyes. They were seen at once upon arrival at the hospital, first aid having been given their eyes by tap water irrigation at the place of injury.

The eye findings were similar in each case, but they were less extensive in the younger man. The lids were matted together by a tenacious blackish-brown pasty powder. The bulbar and palpebral conjunctiva had numerous small and large adherent islands of this paste which were removed with difficulty. Especial care was given to each cul-de-sac. Marked conjunctival congestion and chemosis were already present. The corneas were deeply clouded although they were not covered with this paste. Initial examination revealed complete anesthesia of both corneas in the older man. The corneal epithelium stripped off with the ease that a skin "blister" is removed. The underlying cornea was very clear and only slightly lusterless. Because of the corneal anesthesia a grave prognosis was given. Local treatment of atropine, holocain, warm sterile water irrigations, and antiseptic ointments was used. Castor oil was also instilled for the first few days because of its reputed lymphagogic action. After six to eight days the surface epithelium was almost completely replaced, but it

became cloudy and after a few more days sloughed, leaving a thinner cornea. This repeated itself once more during a similar period of time. Conjunctival grafts could not be considered and other mucous membrane grafts were thought inadvisable. Approximately one month after injury the subjective symptoms began to subside as the permanent scar tissue became infiltrated and established in the cornea. Islands of scar tissue deposited themselves, and with oblique illumination and the slit lamp these were found to extend to the basement membrane with only small interspaces of transparent corneal tissue. At this time there was light perception only. The fundus reflex was not obtained, neither could the fundus be inspected. The conjunctiva had returned to normal with only some circumcorneal, conjunctival, and anterior ciliary artery injection. Fortunately and surprisingly, symblepharon and lid deformities had been escaped.

Three months after injury the areas of corneal scars had become confluent, blocking out the former interspaces of transparent cornea. One year later the right corneal epithelium had been completely replaced by dense irregular surfaced scar tissue and with a pannus coming in from the superior nasal and temporal sides extending over the pupillary area. The pupil and iris were not observable. There was no light perception. The left eye was the same as the right except for a denser pannus and more intensity of scar tissue, leaving no light perception.

The course of the second and younger man was shorter and less severe. There was only the initial sloughing of his entire corneal epithelium which was at no time anesthetic, indicating the comparative superficiality of his burns. After the initial slough the epithelium replaced itself and for a period of ten days had a normal luster. Then small indistinct islands of scar infiltrated the substantia propria, assumed a certain intensity, and remained stationary. This scar encroached upon the pupillary area. A pannus did not develop. His local treatment had been the same as in the previous case. One and one-half years after injury vision was 20/100, 20/200, and with corrections 20/65, 20/200, with no changes noticeable in the corneae. Fundus reflexes and fundus examination were accessible through dilated pupils.

Lime burns, like acid burns, may or may not produce corneal opacities. This is dependent upon the offending preparation, that is, if it is the dry powder, in combination with other materials such as sand, or an aqueous solution. The dry lime powder adheres to the cornea and conjunctiva, and its action is intensified and prolonged because greater difficulty is met in removing it. When combined with sand, the abrasive action of the latter permits the lime to rapidly penetrate deeper, thereby inflicting more severe and permanent damage. According to Barkan,<sup>3</sup> the resultant corneal changes are calcium albuminate and carbonate, the latter probably forming the greater portion



of the opacity. The opacity may increase due to a changing of the calcium albuminate of the cornea into calcium carbonate by the carbonic acid of both the air and the tissues. This opacity then is merely a substitution of calcium carbonate for scar tissue.

#### TREATMENT OF CHEMICAL BURNS

First, there is no specific treatment. The results obtained depend almost entirely upon the type and strength of the damaging agent, and secondly, upon the physical response of the patient and our success to prevent and treat the ever menacing complications. Many experiments have been done in the hope of producing an effective specific treatment. Some workers have reported fair success and others have had none. In these cases we are confronted with a grave prognosis. The milder ones at the beginning frequently become the most disparaging ones and terminate in permanent disability regardless of the skillful and resourceful care they have been given. They must be handled with the most meticulous care from the start and each one considered as potentially grave.

Various neutralizing solutions for both the acids and alkalis have been developed, varying in dilutions and in the process of usage. The majority of these have not been gratifying, very often increasing the damage already done. The most dependable treatment is the immediate and abundant irrigation with sterile water. Every vestige of the irritant is to be removed in this mechanical way and tightly adherent granular particles may require some instrumentation to facilitate their dislodgement. The cul-de-sacs with their many folds of swollen conjunctiva may retain a surprisingly large amount of material. This requires great care to eliminate these reservoirs by moderate tension upon the folds and continuation of the irrigation. If this is neglected, then there is a "feeder" for more chemical damage and more possibilities of symblepharon. The factor of the time interval existing between the injury and the water irrigation is of extreme importance, and this alone may control the outcome. Time for a topical anesthesia prior to irrigation should not be taken except in extreme cases. It is to be remembered that some of these burns have already produced a corneal anesthesia. Following the irrigation, treatment consists mainly in atropinization, antisepsis, and cleansing warm irrigations. Any reliable topical anesthetic except the continued use of cocaine is often necessary to control scratching. Oleum ricini is a good emollient, both for its lubricating effect and its ability to keep the corneal epithelium soft and pliable. It has also been reputed to be an excellent local lymphagogue and aids corneal and conjunctival nutrition and drainage. Menacing complications, such as ulceration, herniation, perforation, cyclitis, glaucoma, and symblepharon, must be met as the individual case demands. Age and physical condition do play some part in the results we obtain, but the treatment is more or

less universally the same for all types of chemical burns with some individual variations. Benefit and hurried healing of corneal burns may be obtained by any selected type of conjunctival or other mucous membrane graft. However, all of the chemical must have been removed before this is attempted. The proper time for this is dependent entirely upon the physician's judgment.

The immediate and copious use of a ten per cent neutral solution of ammonium tartrate used at once has been tried in lime burns. In the hands of some physicians excellent results have been obtained. This is due in part to the period of time elapsed between the injury and the installation and also the dilution of the lime as it enters the eye. Barkan<sup>3</sup> uses it in a four per cent solution twice daily for treating corneal opacities resulting from lime burns. The eyes are cocaineized prior to the installation. He used this in four cases with fair results. Wolff<sup>4</sup> also recommends this treatment for helping to clear corneal opacities from lime burns.

#### SUMMARY

1. All chemical eye burns are potentially grave.
2. Drastic measures to prevent them must be made.
3. Early prognosis should be held in restraint.
4. Initial copious water irrigation is all-important.
5. Cleanliness and antisepsis is necessary.
6. There is no specific treatment.

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## BICHLORIDE OF MERCURY POISONING\*

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The recent increase in the number of cases of poisoning is probably due to financial and domestic troubles accompanying our present period of depression; over 23,000 persons committed suicide in this country in the year 1932. Newspaper publicity, plus the ease in obtaining it, have led many of those seeking an easy escape from their temporary indispositions to use bichloride of mercury in its tablet form. Many cases have been seen in the last two years and carefully studied. Although very serious in its consequences, the ingestion has received comparatively little attention medically since the study and outline of therapy by Lambert and Patterson in 1915. Its increasing prevalence, we feel, deserves more study.

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The pathological findings in mercurial poisoning are fairly constant. There is first an extensive necrosis of the epithelium of the alimentary canal. This is due to the contact of the highly concentrated solution of mercury with the mucosa of the stomach and bowel. Small doses of mercury cause a diuresis. Large doses do not disturb glomerular function, but may even accelerate filtration. Large doses, however, do cause a necrosis of the tubular epithelium, probably due to the concentration of mercury caused by reabsorption of fluid. There may be other minor pathological changes, especially in the liver. All such damage is confined to the surface and heals without the formation of cicatricial tissue.

Death in these individuals is not due to the above pathology in most cases, but is due to a condition resembling surgical shock. Berger and others have shown that in experimental animals and in humans, when death occurs in the first few days after the poisoning, the laboratory findings indicate a state of shock with lowered chloride content of the blood and decreased blood volume. In fact the treatment formerly used, such as repeated gastric lavage, high colonic flushings and forcing of fluids orally in the presence of vomiting and diarrhea, all tended to increase the state of shock by depletion of fluids.

Treatment of these cases since 1915 has followed the Lambert-Patterson method, which attempted to prevent absorption of mercury in the stomach and bowel, and to hasten elimination of whatever mercury had already been absorbed. Since in these cases of severe poisoning, vomiting and diarrhea prevented the continuance of most of their recommended treatment, our study led us to what we believe is a more rational form of therapy. This included the customary early cleansing of the stomach by use of lavage, protein, or apomorphine if needed, but also went further in the prevention of shock by using strenuous methods to prevent fluid depletion by vomiting and diarrhea and to furnish large quantities of fluid intravenously or subcutaneously to build up a large urinary output.

Although the outcome of such treatment is not entirely satisfactory, still it seems more logical than other forms of procedure.

All cases entering the Indianapolis City Hospital in 1932 and 1933 with a diagnosis of bichloride poisoning were observed and treated with the various methods by the various staff doctors. Of the sixteen whose charts were carefully studied, nine cases came under my personal supervision. From this group were excluded all cases where there was the least doubt clinically as to the actual ingestion of the drug.

Most of these patients took the bichloride in its tablet form, of  $7\frac{1}{2}$  grains each. One case reported took a massive dose of blue ointment internally, but its slow absorption seemed to prevent any serious effects. Several others not reported took calomel in large doses, but not enough to

cause urinary changes or toxemia and so were not included in this report.

The dose taken varied considerably. The patient's account was not often reliable and could usually not be verified. The fact that some of these patients vomited immediately after ingestion, made the amount of mercury retained problematical. The rapidity of first aid treatment also prevented a reliable estimate of mercury absorbed because all but five of these cases had either a gastric lavage or were given a large amount of protein within 30 minutes after taking the poison. The largest single dose was  $52\frac{1}{2}$  grains, that patient dying on the seventh day. Our other fatal cases took 30, 30, and 15 grains. Others took as high as 45 grains,  $37\frac{1}{2}$  grains and 30 grains and still made an uneventful recovery. Throughout the study of these cases, it was very noticeable that the amount of mercury taken had very little relation to the symptoms, pathology or prognosis. I do not believe that this was entirely due to the unreliability of the dose taken or amount absorbed, but do feel that there is considerable variation in the minimum lethal dose regardless of sex or weight.

The emesis interval in the fatal and non-fatal cases was not constant or dependable. Of the four who died, one vomited instantly, one in three minutes, one in five and one in ten. On the other hand three cases lived who vomited corresponding doses in fifteen minutes, twenty minutes, and four and one half hours.

In our series of cases, four died out of sixteen treated. One of the latter group signed her own release from the hospital on the twelfth day in poor condition with probable death later on. Two of these cases died on the seventh day, one on the eighth and one on the ninth. All four cases were extremely toxic from the start and all showed all the characteristic findings of extreme poisoning.

The signs and symptoms shown early in this condition are few. When first presenting themselves, slight gastric distress and later vomiting and diarrhea are complaints. The gastritis usually responds within twenty-four hours to treatment with milk and white of egg. The mouth may show some mercurial stomatitis but this is usually not very prominent. The heart and pulse remain about normal, and no other signs or symptoms develop until the patient's attention is called to an anuria or oliguria which may develop in 48 to 96 hours. Usually these are the ones who have developed more severe gastrointestinal symptoms with intense vomiting and abdominal cramps and also a bloody diarrhea. These latter symptoms may persist for as long as two weeks, but if the anuria is not relieved within 96 hours, the patient will not live. One of our cases was catheterized of less than 50 cc. daily for 96 hours and still recovered. All four of our deaths followed an anuria of 48 to 96 hours. Again one case with anuria had taken only 15 grains of bichloride





4. The Lambert-Patterson treatment is very satisfactory in mild cases not complicated with vomiting, diarrhea or shock.

5. Immense amounts of normal salt solution (1,500 cc.) with added glucose, given intravenously daily until the urine improves in quality and quantity, have a decided effect upon the favorable outcome of this type of poisoning.

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## THE CONSTITUTIONAL FACTOR IN DISEASE\*

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The milliner and the modiste have no monopoly on changes of style. The history of the human race is one of constantly changing concepts in all phases of life, in religion, in social usage, in education, and in a very large measure in an attempt to determine the cause and cure of disease. Medicine never has been and never can be an exact science. In the laboratory two and two always make four, but in the human economy they are much more apt to make three or five. There is a peculiar something about the reaction of the individual human being to ill health which makes it utterly impossible to evaluate with certainty the significance of a symptom or of a clinical syndrome, and in consequence the underlying cause of disease has long been a moot question—a question the answer to which has varied with the temperament and the intelligence of the people who have tried to answer it.

Sigerist says, "We may assume, a priori, that disease has existed since life began upon earth, for disease is naught but a mode of life itself under altered conditions."

Primitives, ancient and modern, invariably associate disease with the supernatural, with mysticism, with sorcery, with magic. Frazer in his famous book, "The Golden Bough," has pointed out the

similarity of folk-ways and folk-tales, in peoples widely separated by time and by space. The common point upon which all *medical* folklore converges is "Animism," the notion that the world swarms with invisible spirits which are the cause of disease and death.

Garrison groups the reaction of primitive man to disease under three heads: First, he construes natural phenomena as supernatural. For example, storms, lightning and earthquakes are the evidence of offended gods. Likewise, disease is the evidence of a deity offended. Second, he believes that disease may be induced by a human being possessed of supernatural power. Third, he believes that disease may be induced by the offended spirits of the dead. His defense is to call upon mystics, medicine men, sorcerers, to cure by exercising their power against such evils. Primitive medicine is inseparably linked with primitive religion. "Medicine man and priest are mingled in many, if not in most cults."

Perhaps the first attempt to rationalize the etiology of disease was the development of the humoral theory of Hippocrates about 400 years before the Christian Era. The Greek "Father of Medicine" thought that the body contained four humors—blood, phlegm, black and yellow bile—and that an imbalance in the proportion of these elements was responsible for the production of disease. Aristotle, a few centuries later, retaining the four humors, added the qualities, hot, cold, moist, and dry, and taught that in various combinations with the humors these qualities affected the health of the individual. This theory dominated the thought of the medical world for many centuries, and we have today in the nomenclature of medicine such expressions as "a man of sanguine or phlegmatic temperament" or a "bilious individual."

However fallacious his humoral theory, Hippocrates established the principle of the intrinsic reparative and recuperative power of nature, "Vis medicatrix naturae," as sound today as when enunciated.

With the passing of the years there were developed many schools of thought in medicine, each riding on the wave for a while until superceded by a newer and oft-times more fantastic principle. Thus we read of the astrologers, the numerologists, the iatrochemists, the eclectics and the homeopaths, and in more recent times of the schools influenced and dominated by cellular pathology, by bacteriology, endocrinology, or psychology.

About 1916 Dr. Frank Billings enunciated his theory of focal infection. This was elaborated by numerous investigators, chief of whom was Rosenow of the Mayo Clinic, and together they popularized their conception of focal infection, so that during the past fifteen years it has dominated the thought of the medical world to the practical exclusion of all other theories of disease. However, as Osler has said, "Once or twice in each century the serpent entwining the staff of Aesculapius gets

\* Presented before Indiana University Seminar, April, 1933.



restless, untwists, and in his gambols swallows his tail, and at once in full circle back upon us come old thoughts and old practices which for a time dominate alike doctors and laity." We are now living in such a period. Old thoughts and old practices have come to the fore and there is an ever-increasing tendency to recognize and appreciate the intrinsic causal factors in disease rather than the extrinsic, the endogenous rather than the exogenous.

Under the name of "constitutional medicine" this conception of the etiology of disease has developed a distinct school of thought with a host of able leaders at home and abroad. Draper and Stockard in America; Tandler, Kraus and Martius in Germany; Viola, Giovanni and Pende in Italy, have done much to popularize it, and there is an enormous literature with a nomenclature so complex and so baffling as to require special glossaries for its understanding.

My own introduction to constitutional medicine was some ten years ago while attending a clinic of Dr. Isaac Abt in Chicago. Dr. Abt presented two patients just recovering from scarlet fever, babies reared in the same orphanage under identical environmental conditions and exposed to the same scarlatinal infection. One of the children very nearly died of a complicating nephritis, while the other was so slightly ill that it was with difficulty that the diagnosis of scarlet fever could be positively established. One of the group present asked Dr. Abt if he could explain this difference in the response of the two children to the same infection. Grasping the lapel of the coat of his questioner and the lapel of his own coat, Abt replied, "This is the difference, Doctor, it is the fabric from which they are made." It was perhaps a homely simile, but this simple illustration carries with it the full gist of our conception of the constitutional factor in disease. We vary according to the fabric from which we are made. Someone once asked the late Sir William Osler how to reach a ripe old age and in his characteristic way, Osler replied with a smile, "Select your grandparents with great care and avoid motor accidents."

As long ago as 1822 a French clinician, Rostan, wrote what Viola declares to be even today "the most perfect, broad and comprehensive view of the constitutional problem" that has been presented. Rostan says, "It is rare for a perfect balance to exist in all the systems of the animal economy. This complete harmony has perhaps never existed outside of the imagination of the ancients. One system nearly always appears to predominate over all the rest. Accordingly it is easy to conceive that the dominance of one apparatus should imprint an important modification upon our physical and moral constitution. In fact, the various systems that we have recognized as entering into the makeup of the human body, and the fluids that form part of it, are not always found in such relation as to pro-

duce a perfect balance. Sometimes we have a predominance of the gastro-intestinal apparatus, and from this we have a particular type of organization. In other cases the respiratory and circulatory organs predominate, from which we again have a new constitution; or the apparatus of locomotion takes the lead, or the neural, or the reproductive. We believe that it is this predominance of one or another system that gives its stamp to the various organic constitutions, which are as numerous as the systems themselves, and which differ according to their infinite possibilities of combination. This fact accounts sufficiently for the innumerable varieties of temperament which nature offers us for observation."

While space does not permit a discussion of the minutiae of the various theories of constitutional medicine, there are a few fundamentals that must be made clear. First, the transition from what Johannsen is pleased to call the genotype to the phenotype. The genotype is the individual at the moment of conception, the phenotype the "realized person" or the mature adult. The genotype represents only inherited qualities, whereas the phenotype is the mature individual endowed with these inherited qualities plus those attributes that have been acquired through environmental contacts.

The basic conception of constitutional medicine is the division of mankind into definite body types. While an attempt has been made at very elaborate subdivision, in the final analysis most individuals can be properly classified as belonging to one or the other of two types, the linear or the lateral. The linear type is the "dolichomorphic" of some writers and carries with it the attribute of microsplanchnic development. The lateral type is the "brachymorphic" and implies a megasplanchnic conformation.

Type is inbred and inborn, but constitution changes with the years. Stockard gives, for example, "a linear type of individual who during adult life develops mild acromegalia—this does not alter the type, though the constitution of the person becomes greatly modified." Barker has reminded us that "no two persons are precisely alike. Each human being is a unique person. No one just like him has ever existed before nor will anyone just like him ever exist again." It must be made clear that no two individuals have ever had exactly the same environment. From the very moment of conception injuries to or illness of the mother change the environment of the child, and various factors, many of them comparatively trifling, affect the environment throughout life.

Consideration of heredity is the keynote in the study of the constitution. I have no thought of going into the details of the laws of heredity. As is well known, these are largely the result of the work of an Austrian cleric, Gregor Johann Mendel. In 1865, working with common cowpeas, he demonstrated the presence of dominant and recessive

characters which are transmitted from parent to child according to an order as immutable as Newton's law of gravity. Unfortunately, Mendel's work was published in an obscure journal and did not attract the attention of the scientific world at large.

About 1900 De Vries, Correns, Tschermak, and Johannsen, independently of one another, re-discovered the law which Mendel had first enunciated, and from their work as well as that of Mendel our present knowledge of heredity has been developed.

I shall quote at some length from the work of Dr. Maude Slye, who for many years worked on the problem of cancer in mice. She says, "Let me here state what I conceive to be the biologic law of heredity, the law common to all life: *'that which goes into the germ-plasm must come out in the offspring.'* I must ask you to conceive of this simple law as being as ironclad and as immutable as any elementary law of physics, or any elementary law of chemistry. If acid is added to metal, a fixed reaction occurs inevitably. What is put into the germ-plasm will come out in the offspring just as inevitably.

"Now the most striking characteristic of natural law is that we cannot break it. We can study it, learn to understand it and work with it, or we can ignore it and combat it and be broken by it; but we cannot break it or change it. It is this very immutability that holds the organic world together. The law of heredity is a general law; not one law for a mouse and one for a man, but one common law of heredity, applicable equally to the seed of a geranium, to the ovum of a guinea-pig, or of man.

"The progress of evolution reveals the constant and unbroken control maintained by the law of heredity, in that man, the latest product of evolution, starts with a single cell, recapitulates in his embryonal development the history of organic evolution, and in his turn sets off the single cell (the germ-plasm) made of the stuff he received from his ancestors and no other; and he puts into it the identical material, which in its turn again divides, and in its embryonal growth briefly recapitulates organic history until in time it becomes the finished example of the species. Each individual is made of the material received from his ancestors: in his general build, in his length of leg, in the shape of his nose, in the color of his hair, in the kind of kidney, the kind of liver, the kind of epithelium, the kind of connective tissue, and the kind of endothelium."

These views of Maude Slye are at the present time generally accepted and the literature of medicine is replete with a catalogue of diseases in the etiology of which heredity plays the principal role. Classical examples are amaurotic family idiocy, migraine, cancer, insanity, epilepsy, diabetes insipidus, obesity, endocrinopathies, sickle cell anemia, hypertension and hypotension, cystinuria, porphyrinuria, retinitis-pigmentosa, achondroplasia, Hunt-

ington's chorea, allergic diseases, and in the sex-linked varieties, haemophilia and color-blindness. Perhaps the most interesting and convincing report in recent literature is that of Vessie,\* in which he discusses at length the transmission of Huntington's chorea for a period of 300 years in the famed Bures family group. There is a matter of particular historical interest in this report in that members of this group contributed a large number of the poor souls accused of witchcraft in the early colonial days. Vessie has traced chorea in an unbroken line through twenty-two generations, from 1630 to 1932 and summarizes his article as follows: "Huntington's chorea is transmitted directly and persistently from generation to generation. The relentless intelligence which controls the faulty evolution shows no disposition to revoke or alter the nature of the severe heritage. Pathologists report extensive, multifarious lesions in the brain structures, but agree in final analyses on constant atrophic changes in the corpus striatum and cerebral cortex.

"A congenital lack of vitality in the nervous system is evidenced by irritability in the personality makeup of many members destined to this type of chorea. The early psychosis in this incapacitating disease manifests frequently a psychological background as a result of the irritability, sensitiveness, fear, anxiety states, suspicion, shame and social ostracism. The memory impairment, deterioration of interests and other gross mental changes are the result of cortical pathology."

A study of the psychopathic temperament is such an enormous subject in itself that it may only be touched upon lightly. Suffice it to say that Kretschmer and numerous other writers have divided the psychopathic group into two major classes, the schizo-phrenics and manic-depressives, and teach that all so-called perfectly normal individuals manifest tendencies which show a leaning to one or the other of these classifications. Walter Freeman believes that there is a definite relationship between the psychological reactions of an individual and his reaction to organic disease. He says, "Life is a constant interplay of action and reaction. External influences impinge upon the individual and he reacts to them more or less specifically, in a manner determined by his organismic pattern. If he reacts in a particular manner to a psychologic insult, he will react in an analogous manner to a bacterial or to a chemical insult. Some correlations between personality reaction type and disease susceptibility are indicated. By a study of the personality of the patient some insight may be gained into the manner in which he reacts to other situations. Diagnosis and prognosis, as well as therapy, depend upon knowing the patient." The poet Schiller has said, "Es ist der Geist der sich den Koerper baut" (It is the soul, or psyche, if you please, which builds the body).

\* Journal of Mental and Nervous Diseases, December, 1932.



Pende teaches that there are six conditions affecting each form and function of an organ, tissue or cell, and enumerates them as follows:

"(1) The original and hereditary cellular autotonus of the tissue or organ, from which form and function may arise independently of any other regulating factor; (2) hormonal influence; (3) anabolic and catabolic neuro-vegetative influence; (4) the influence of blood crisis (especially through the ionic equilibrium); (5) vascular and vasomotor influence; (6) psychic influence." He teaches, however, that "exogenous stimuli acting upon the germ plasma in process of development may have an elective affinity only for certain parts of the body, and may determine through the alteration of such parts a general evolutionary imbalance, and hence an anomaly of the entire definitive constitution."

The development of our knowledge of the endocrines has influenced enormously our conception of the changing constitution. The role of the gonads, the pituitary, the thyroid and the adrenals is now generally accepted as determining in very large measure the body build and temperament. Pende emphasizes the role of the endocrines in the six diatheses which he enumerates as influencing the principal morbid temperaments. These are:

1. The arthritic, in which he includes the exudative and hypersecretory.
2. Psychopathic.
3. Heredo-syphilitic.
4. Heredo-tuberculous.
5. Heredo-neoplastic.
6. Neuro-endocrinopathic.

The effect of environment in the production of disease presents an interesting study. As has been said before, environment affects the individual from the moment of conception. At the very moment of birth, extraneous factors become operative that affect the entire future. The hygiene and sanitation of the home, the intelligence displayed by the mother or nurse may make for health or disease. Food is an important matter. An improperly balanced ration, with inattention to its vitamin or mineral content may be responsible for disease that affects health throughout life. On the contrary, proper consideration of these details with careful regulation of habits, supervised play and exercise, fresh air and sunshine may build a foundation that will go far toward protecting, for all time, against the ravages of disease. Climate, altitude, barometric pressure, seasonal changes—all are extrinsic factors that influence health.

Later in life, occupation may, in many instances, affect not only resistance to disease, but be responsible for the actual development of certain ailments. As long ago as 1700, Ramazzini devoted an entire volume to the study of occupational diseases, and the effect of occupation on health has

claimed the attention of physicians ever since Ramazzini's time.

Companionship may do much to influence the psychic life of the individual. The study of twins has thrown a great deal of light upon the relative influence of heredity and environment. Schokking has reported an interesting study in which twenty, one-celled or identical twins, showed psychic concordance in nineteen instances, whereas twenty-four fraternal or two-egg twins showed psychic discordance in every instance. Newman has recently written at length upon a pair of identical twins reared apart. Identity was established not only by likeness of features, but the finger prints and palm patterns of the two were so remarkably similar that they might easily have been confused by a Bertillon expert. These girls were separated at the age of eighteen months as the result of the death of their mother. One was reared in Canada, the other in England, and the separation continued until their adult life. Examination at this time showed a difference in mental age of two years and a difference in intelligence quotient of twelve, one was classified as normal, the other distinctly backward. The author concludes his report with the statement that "in this pair of twins differences in environment and in training have been responsible for bringing about a significantly great divergence in intellectual ability, but that their temperamental or emotional traits have remained unusually similar."

In a study of the constitutional factors in the production of disease, the phenomenon of allergy presents a peculiarly interesting problem. Here there are always two factors, one endogenous, the other exogenous. First, the peculiar, inherent susceptibility of the patient and second, exposure to some external irritant. Thousands of individuals, for example, may drink milk with impunity, whereas an allergic individual will find a glass of milk nothing less than a poison. This example may be multiplied many times over with extrinsic irritants ranging from sensitivity to heat and cold through a wide range of foods and mechanical substances and bacterial poisons. Delayed allergy, that is, the phenomenon in an individual who has developed an allergy after maturity is reached, is explained on the theory that he has had the peculiar idiosyncrasy since his birth but that it has only manifested itself because of some factor which has reduced his resistance. It is explained in much the same way as one's contracting an infectious disease at a particular time, whereas previous exposure has not resulted in an infection. This brings up the enormous subject of natural immunity, which may be mentioned only in passing, as the complex mechanism of immunity has no place in this discussion.

To the student of medicine, a consideration of the constitution offers a profitable and a fascinating study. It necessitates excursions into the realm of anthropology, anthropometry, endocrinology, ge-

netics and many similarly interesting fields, and its proper interpretation gives to the physician an appreciation of his medical problems that he can get in no other way. It teaches him, as nothing else can, that it is Mrs. Smith and not Mrs. Smith's symptoms that must engage his attention. The constitutional factor is the soil, the extrinsic factor the seed in the production of disease.

It is interesting to speculate on the future of constitutional medicine. It is the dream of the eugenicist to some day control the constitution by selective human mating. It is a relatively easy matter for the biologist working with laboratory animals to breed as he wills, but it is another matter when the eugenicist undertakes to select parents with a definite type of progeny in mind. Human mating is so often the result of propinquity, expediency, necessity, or in this day and age, a vicious combination of boot-leg gin and an automobile, that selective mating is at best a Utopian dream.

The place of the constitution in the medical curriculum is discussed by Madge Thurlow Macklin of London, Canada, in a recent number of the "Annals of Internal Medicine." Doctor Macklin believes that throughout the entire period of clinical instruction clinicians should point out and emphasize the hereditary factors in disease and that in the senior year there should be a formal presentation of the entire subject of constitutional medicine by one especially trained in biology and genetics. She says: "Much knowledge concerning the inheritance of disease has been accumulating which is of very practical importance to the practitioner; practical because it will increase his diagnostic acumen, his therapeutic skill, his prognostic ability, and will at the same time enlarge his opportunities for preventive work. This knowledge, it is true, has not been taught to the medical student in the past, except as it came in as an aside in the clinical lectures of some clinician particularly interested in heredity. The students of today are receiving little information on the subject and as they become the clinical teachers of tomorrow, the lack of teaching in this branch will continue. For this reason we should have a definite course designed primarily to teach the student what is known of heredity in disease."

Doctor Macklin's plea is timely and will no doubt receive serious consideration in the planning of clinical courses in many schools. We must, however, avoid making of constitutional medicine a fad or a hobby and letting it over-shadow the many other factors which enter into the intelligent study of our medical problems. Let us instead give ear to the teachings of Knud Faber, who says: "We must emphasize that all concepts of disease, like all other concepts denoting species, are human abstractions, not objective entities. Philosophically speaking, everything is fluent."

226 Hume Mansur Bldg.

## APPARATUS FOR SUCTION-SIPHONAGE

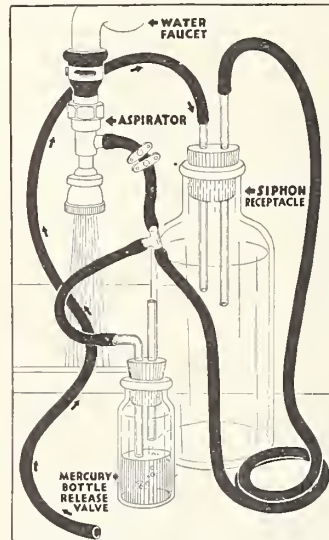
W. D. LITTLE, M. D., F. B. RAMSEY, M. D.

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INDIANAPOLIS

The use of a water pump to produce a vacuum, and the incorporation of an automatic release valve in the vacuum line makes an ideal apparatus for most cases where suction-siphonage is desired.

This adaptation of negative pressure has been found useful in many different conditions. It was originally used by us in the treatment of duodenal fistulae. After using the Davis bottle modification in several cases of high intestinal fistula, this form of apparatus was found to be more simple, and more positive in its action. It has since been used to decompress the stomach and upper intestinal tract in intestinal obstruction, and after stomach operations. The use of continuous suction (especially for the proper type of intestinal obstruction), as advocated by Wangenstein and others, makes us feel that this particular apparatus will be widely used because of its simplicity.



The essential feature is the mercury bottle release. A large bottle, partly filled with water, will serve the same purpose. Without this device the suction tip (Levine tube if in the stomach), becomes obstructed by adhering to the wall of the viscus and fails to function. The release automatically permits continuous aspiration by releasing the vacuum in the tube.

When used in the treatment of a high intestinal fistula, a wire screen or larger perforated tube

may surround the suction tip, thus minimizing the difficulties due to plugging of the holes in the tip. Continuous drip of normal salt solution, weak hydrochloric or acetic acid may be used at the same time, and the wound can be kept dry. When attached to an enterostomy tube it tends to hasten decompression. The length of rubber tubing between units can easily be varied to suit conditions. A piece of Penrose tubing may be attached to the lower end of the aspirator to lessen noise.

We believe that this apparatus has enabled us to avoid enterostomy in several patients with widespread peritonitis after appendicitis. The use of suction-siphon treatment in obstruction may be dangerous if too great dependence is placed upon it. The patient's condition should be carefully watched so that enterostomy, if needed, will not be delayed too long.

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AUGUST, 1934

EDITORIALS

CONTROL OF SYPHILIS

We feel impelled to call to the attention of the physicians of our state that one of the most encouraging features for the control of the wide-spread prevalence of syphilis was a movement recently adopted by the Indiana Division of Public Health. It is obvious that in their efforts to control as well as prevent all forms of communicable diseases the Department of Public Health must have the support and cooperation of the organized medical profession. It is also a well known fact that medical treatment for the infected venereal patient is one of the greatest relief measures, and it is a vital part of their control activities. This is especially true insofar as the treatment of syphilis is concerned. Plans were formulated which became operative May 1, 1934, to provide free neo and sulpharsphenamine to physicians for the treatment of indigent infectious syphilitic patients who are in a stage of infection or period of life which endangers other individuals or progeny. Patients, under this plan, are to be treated until they are rendered non-infectious to ordinary contact whereby they would no longer be a menace to public health. It is the intention of the Division of Public Health also to furnish the necessary arsenicals for indigent expectant mothers infected with syphilis during the period of pregnancy, because if intensive treatment is provided in such cases it will invariably insure the pregnancy of running to the period of maturity and the birth of the child free from congenital syphilis. In communities where public health clinics are available, or where clinics are being operated at the expense of their city or city and county, indigent patients are expected to report directly to the public health clinic for anti-syphilitic treatments. This plan is worthy of the respectful consideration of the medical profession.

It is earnestly hoped that this action on the part of the Indiana Division of Public Health will bring about a solution to the conflicting and heretofore unyielding attitude of the numerous belligerent factions in public health and the medical profession. There should be no hesitation on the part of physicians to request these arsenicals, and there is no reason why indigent patients should now be deprived of medical treatment. We heartily endorse this plan and we desire to encourage physicians to support this movement. It is our opinion that in the future we can look for unity in the much-discussed subject of public health and preventive medicine vs. curative medicine.

MEN IN WHITE

Keen-visioned, decisive, perspicacious, masters of life and death are these men in white, these physicians who as members of the American College of Surgeons are among the select of their profession when they work under the intense brilliance of the flood-lighted surgery. Blundering, arrogant, visionary and publicity hunting opportunists are these self-same men in white when they set themselves up under the dazzling light of the public gaze to speak for the rank and file of the medical profession in the matter of medical economics.

This is the general appraisal of the rank and file member of the Indiana medical profession when he has recovered sufficiently from his surprise to comment upon the now notorious resolution presented by the Medical Service Board and adopted by the Board of Regents of the American College of Surgeons, and given wide publicity. This resolution which caused the repercussion of criticism against the college at the recent American Medical Association meeting in Cleveland states that "The periodic prepayment plan providing for the costs of medical care of illness and injury of individuals and families of moderate means offers a reasonable expectation of providing them with more effective methods of securing adequate medical service." All of which to John Average Doctor, M. D., means nothing more nor less than that the college has "come out" for group hospital and medical insurance and consequently socialized medicine.

The resolution apparently was the last straw and many comments concerning the failure of the American College of Surgeons to live up to the highest traditions and ideals of the medical profession which heretofore have been whispered in low tones now are being broadcast on broad wavelengths both by men who are members of the college and by those who are not.

Outstanding among these open criticisms of the college and its leaders, picked up from conversations wherever physicians may gather, are the following:

"The College of Surgeons has overstepped its bounds in attempting to force the profession into some form of socialized medicine."

"The American Medical Association and not the College of Surgeons is the true mouthpiece of the profession on matters of economic and social importance."

"The American College of Surgeons should confine its interests and activities as an organization to purely scientific matters."

"Some certain physicians with nation-wide reputations have used the College of Surgeons and other special organizations as a sounding board to promote their own personal publicity."

"Sure, the A. M. A. was asleep, but what right has the College of Surgeons to standardize hospitals and set up rules and regulations for these institutions? That should be the work of the A. M. A. Council on Hospitals."

"The College of Surgeons apparently has a code for the big shots and another very strict code for the little fellows."

"What about the report that an officer representing the College of Surgeons has made a trip to Washington and has attempted to sell the President upon some form of health insurance under the guise that the College of Surgeons, containing the elite of the profession, is the proper spokesman for the profession in such matters?"

Others of much more personal tone and specific accusation have been expressed against leaders in the college—men of prominence and high standing in the profession.

From the above bits of conversation it is plain that the College of Surgeons has lost much of the confidence of the profession in general and gives some of the reasons why many of these lesser "men in white" who do not desire the dazzling light of publicity and who make up the large mass of the college are this minute pondering as to whether it is better to resort to radical surgery or resign from the case and let the patient pass on to an agonizing but natural death.

#### THERE ARE NONE SO BLIND

Down in the central part of Indiana there is a little community that has been a thorn in the flesh of state health officials for many years. For more than twelve years, typhoid has thrived there, and numerous efforts to interest the citizens in cleaning up the village have availed nothing, for they seem unable to sense the fact that typhoid is a filth disease and that a little common sense in the way of health measures might eradicate the pest from their midst.

Our Division of Public Health has long considered measures looking toward a solution of the problem and Dr. Thurman B. Rice, assistant director, finally decided to beard the lion in his den. He called a public meeting for the purpose of laying the matter before the citizens and, according to the *Indianapolis Times*, the meeting must have been of the "show down" variety. From the press re-

port we learn that Dr. Rice did a right good job of telling the assembled folks just what was what and, although he was all but man-handled, he did not back down in any degree. One irate citizen attacked Dr. Rice with this verbal bomb: "You might have more education than we do, but just because you are a young fellow you don't need to think you can come out here and talk to us like that; we don't like it." But the speaker continued to talk "just like that" and proceeded to set forth a three point program, as follows:

1. Purification of water supply, with a necessary corollary of proper sewage disposal.

2. Discovery of any carriers who may be living in the community, and the stopping of public gatherings where food is served until such discovery.

3. Inoculation.

There is not one point enumerated above that cannot be carried out in any community in the State of Indiana; there is not one that can be omitted with safety where typhoid is present. The continued presence of typhoid in any community is a definite indication of one or two things, namely, gross ignorance on the part of the local residents, or an utter indifference to local health conditions. In either event, if the community will not take care of itself, then it becomes the duty of the state to take charge.

We do not need new legislation for such cases. Our Division of Public Health has plenty of legal ammunition to take full charge of the situation. It is empowered to take over the water supply, to take such measures as will insure an adequate and proper sewage disposal, and even to establish a quarantine of such severity as to prohibit local residents to leave the community or outsiders to enter therein.

The danger of such a situation is not only to local residents; the community under discussion might be termed a suburb of our capital city which has a population of almost 400,000. A single typhoid carrier roaming about in that territory unmolested might easily be the source of innumerable cases of the disease. Autoists, traveling through the village and stopping to eat or to drink, are likewise menaced.

This community is not the only offender within the borders of Indiana. We have too many similar situations—too many communities which show an utter disregard for even the elementary laws of health. Many of our large cities are guilty of such shortcomings, and we have heretofore spoken of a city in Indiana, with a population of more than sixty thousand, whose entire sewage is dumped into a currentless stream—raw sewage at that! It is high time that the Division of Public Health does something about these menaces to the health of our folks; they know that these conditions exist, they have full legal remedies, and we believe it is time to "crack down" on all gross offenders.

"There are none so blind as those who will not see."



## AN EFFICIENT ORGANIZATION

We have been rather intimately acquainted with the affairs of the Indiana State Medical Association for more than three decades; during most of that period we have had somewhat to do with its various official and committee affairs, hence we believe we are competent to discuss its present activities. While self-praise is usually in poor taste, we believe that the present subject calls for more than a casual comment.

Time was, and not so many years ago, when our association was content to hold an annual meeting at which time the officers and some of the various committees had somewhat to say as to their doings; the Council went into formal session and discussed the present state of the medical profession of Indiana; this done, it was declared a day's work and we retired from the scene for another year.

Not so, during the past few years—the picture is an entirely different one. It becomes a highly animated picture. Judging from the annual reports of other state societies, we are of the opinion that none excels us in activities and accomplishments. We continue to have our annual three-day session, but the interim is by no means an idle one. Special groups are called together from time to time, the more important committees schedule frequent conferences, the Council puts in a full day at its mid-winter session, the county secretaries have their annual pow wow—we might go on almost indefinitely enumerating the goings-on. The surprising thing about it all is that busy doctors find the time to do all the things that are done.

Early in the present year the Council put in a busy six hours, going over matters of the greatest importance, and a few weeks later there was an attendance of almost two hundred at the secretaries' conference; a few more weeks and another hundred of our members went into session on matters of an emergency nature. In the meantime, the Executive Committee was holding regular monthly meetings of an average duration of four to five hours each. Then, in July, the annual conference of officials and committee heads attracted some forty members for an all day session.

Our president, our president-elect and our secretary manage to attend county and district meetings at least once every month; certain committee chairmen are called here and there about the state with a marked frequency; department heads from the medical department of Indiana University find an increasing demand for their appearance at meetings. In fact, Indiana medical men are a busy group.

The willingness to serve and the spirit with which these services are given command the respect of physicians everywhere. Our folks, realizing that the past four or five years have been fraught with problems of unusual gravity, have organized a solid front and are meeting every situation that arises; we yield to no other society

in this; in most instances we are leading the procession.

The presidency of our association, a few years ago, was considered little more than an honor; it carried with it little other than the prestige of being "the head of the medical profession of Indiana," as is so aptly expressed in our Constitution and By-Laws; it meant presiding over a meeting for about two days in the year and that ended the duties of the chief officer.

Today your president is hard pressed for time to answer all the demands made upon him; he must be prepared to talk on almost any subject and at short notice; he is expected to, and does, attend at least one meeting of our thirteen district societies; he is an active member of all major committees; as a matter of fact, he has a job and not a position.

We compliment our officers and committeemen of the past few years for their valiant work and for their many achievements and we congratulate the association for having such men as its leaders.

## EXPERT TESTIMONY

In an address before the House of Delegates at the Cleveland session of the American Medical Association, President Dean Lewis commented on the suspicions aroused in the minds of laymen regarding expert medical testimony. He said, "Lay people must think that medicine does not even approach an exact science when two men of equal distinction will give diametrically opposite statements to questions that are asked at a trial. Members of the bar realize the futility of much expert testimony."

Elsewhere in THE JOURNAL we reprint a letter from the Attorney General of Michigan addressed to the editor of the *Bulletin* of the Wayne County (Michigan) Medical Society commenting on this subject and giving therein the reactions of one who has had long experience in the practice of law. His opinion seems to coincide with that of President Lewis.

This is no new problem; it has been before the medical profession for many decades and its solution seems to be far in the future. In fact, there can be no solution so long as medical testimony is carried on as at present. We must make some radical change in this regard ere we can hope to approach a cure for the gross evil, and an evil it is.

As Dean Lewis says, the lay mind cannot conceive why two well-trained medical men can have such a divergence of opinion regarding a common subject; the only inference that can be made is that there must be some financial consideration responsible for one opinion or the other. We recall a statement made some thirty years ago, a statement we have used before, to the effect that a local attorney remarked that he could get medi-

cal testimony in that particular community on either side of a given question for money. He went on to declare that this local community differed in no respect from other communities of comparable size. Such indictments should not go unnoticed, yet most of us must agree that there is more than a semblance of truth in the asservation. Most of us who have had any considerable experience in court work have had occasion to note many instances in which one might be entitled to at least a suspicion that certain testimony was not based on actualities, but was being doctored up for the special occasion. We have noticed, however, that the man who gives such irregular testimony (and we use that term because we feel charitable) sooner or later ceases to be called to testify, for his popularity begins to wane after he has gone beyond the bounds of medical propriety a few times.

In some communities where the supply of purchasable testimony is limited some of our barrister friends use the imported variety. In northwestern Indiana we find this commonly true. We seldom hear of a large damage suit in which one or more Chicago physicians are not used. Recently some of our attorneys seem to have located a testimony wizard, a Chicago chap who is plenty smart and knows how to carry on before a jury. He has appeared in malpractice suits as well as those of the civil variety. It is said his fee is a variable one; that is, he has a set fee for appearing in court and an additional fee for each hour he is away from his office. He is fast acquiring the reputation of being a most convenient witness. According to the records he is a member of his local medical society and complaints of his activities mailed to the secretary thereof avail little or nothing.

Some time ago we suggested a solution of the many-eviled problem, that of taking such matters entirely out of the hands of the individual doctor and substituting therefor a medical or surgical commission. If the court were to appoint such a commission, say three to five reputable physicians of the community, this group could examine the patient, go over the entire record and make at least a majority report, and on this report the court could base its decision.

To our mind there is nothing more disconcerting—we almost said disgusting—than to read in the lay press of conflicting medical testimony; it leaves a bad taste in our mouths; what must it convey to the lay mind?

We are very glad that Dean Lewis has had something to say on the subject and trust that in the near future our various state associations, as well as the House of Delegates of the American Medical Association, will seriously consider the matter and take such steps as are necessary to remedy the evil.

## EDITORIAL NOTES

It may be too hot to think about attending conventions or of listening to a paper, no matter by whom presented. But if you will read the list of guest speakers on the opposite page, we believe your interest in such things will revive. Is there any physician in Indiana who honestly feels that he can afford to miss this opportunity?

WE ADD to the many already published notes concerning the death of Mme. Curie our regret that this great woman scientist is gone. She was awarded many prizes for her work in the discovery and use of radium, and twice was the recipient of the Nobel science prizes. Her place will be hard to fill.

HAD your vacation yet? Better take one, even if it is for only a week-end or two. Just a little respite from the daily routine will be of vast benefit to you as well as to your family. With hard roads most any place in the country, and with railroad fares lower than ever before, one needs but little reflection to determine where to go and how. The physician who neglects vacations is quite like the one who neglects his medical meetings—both are very likely to shrivel instead of grow.

THE Wayne County Medical Society of Detroit sent a questionnaire to its members asking them to indicate their reaction to the experimental plan of health insurance now under consideration by the Michigan State Medical Society. The question was put in this form: "Do you wish the Wayne delegates to *oppose* (italics ours) the action of the Michigan House of Delegates with reference to an experimental plan of health insurance?" The vote was: "Yes" 265; "No" 51. It seems to us that the vote is rather decisive.

IN a recent bulletin of the Bureau of Home Economics of the U. S. Department of Agriculture, the importance of cheese as a part of the ordinary diet is emphasized. The bulletin proceeds to make a very good case of it, and goes into detail to enumerate the many nutrient qualities of this delectable bit of food. We confess to being a "cheese hound" of no mean proportions, but we must register an oft-repeated complaint that too much cheese is placed on the market while in the "green" state. To our mind, cheese, to be real good, must have acquired plenty of age. We will go miles and miles to get a few pounds of aged American cheese.



*Southern Medicine and Surgery*, for July, carries a most illuminating article on the subject of rabies, by Dr. Roy Norton, Rocky Mount, North Carolina. The history of rabies, its diagnosis and treatment, as well as its prevention is very completely covered. The heading of the article, "Why Allow Rabies," raises a very pertinent question. England, the Scandinavian countries, Australia and New Zealand have apparently solved the problem of rabies control, as well as numerous communities in this country. After reading this comprehensive discussion one wonders why any state or community will permit the existence of a preventable disease with just 100 per cent mortality.

IT IS without undue shedding of tears that we note the rendering of a verdict in the rather sizable sum of \$25,000 against Dr. William F. Koch, head of the "Koch Cancer Foundation," of Detroit. The claimant set forth that he had been induced to take the Koch "shots" at \$300 per when, as subsequent developments showed, he did not have a cancer. It is said that Koch will take an appeal in the case. An interesting feature of the suit lies in the fact that Koch did not personally appear at the trial; whether he feared he might be required to go into details as to the treatment used by his "Foundation" we do not, of course, know; but one might be permitted a bit of speculation as to that point.

COUNTY society secretaries are urged to check up on the probability of their elected delegates attending the Indianapolis session. This should be done some two or three weeks in advance of the meeting. This is most important as headquarters should have such information early. The president makes up his list of reference committees well in advance of the meeting and it too often happens that committeemen named are not present. Reference committees save much valuable time in house sessions; they digest the various matters

referred to them as well as any discussion brought before the committees when in session. They present a report covering the entire matter, thus saving much argument on the floor. If your delegate finds it impossible to attend, please see to it that his alternate or some other person is duly credentialed.

THE following legal decision should prove more than interesting to medical folks:

"A woman injured in an automobile accident two years ago was informed by a jury last week that her hurts were only imaginary.

"Mrs. Lucy Kirk refused medical attention after the collision because she was a Christian Scientist and believed pain was only a mental delusion. Yet she sued George Cisler in Supreme Court, Minneola, N. Y., for \$10,000 damages. She had, she claimed, suffered headaches, a tremor of the left hand, and a recurrent pain in the nose.

"Justice Paul Bonynghe listened gravely to the evidence and then charged the jury:

"If,' he said, 'because of her faith in Christian Science, she believed there is no pain and that the way of relief is through the teachings of Mrs. Eddy, you cannot make Cisler pay . . .'

"The jury listened seriously, retired

briefly, and brought back a verdict: Not a cent for Mrs. Kirk; \$75 to Cisler for the injury the woman did to his car."—*News Week*, June 23rd.

KENTUCKY pioneer physicians were honored at dedication services of a building dedicated to "pioneer physicians of Kentucky . . . who in the 18th century brought the art and science of medicine into the wilderness of the West. . ." The small building is called the "Doctors Shop" and is located at Pioneer Memorial State Park, Harrodsburg, Kentucky; dedication services were conducted June twenty-first. Emphasis was placed upon the fact that the profession of Kentucky has made a very

ATTENTION!

Make your plans now to attend the annual session in Indianapolis, October 9, 10, and 11, 1934.

At the present time, the program includes such noted speakers as:

DAVID WALLACE MACKENZIE, M.D., McGill University, Montreal, Canada

ISIDOR S. RAVDIN, M.D., University of Pennsylvania, Philadelphia

ROBERT A. STRONG, M.D., Tulane University New Orleans

EMIL NOVAK, M.D., University of Maryland Baltimore

JAMES S. MCLESTER, M.D., President-elect, American Medical Association, Birmingham, Alabama

LUCIUS E. BURCH, M.D., Vanderbilt University, Nashville, Tennessee

WALTER M. SIMPSON, M.D., Dayton, Ohio

RALPH A. FENTON, M.D., University of Oregon, Portland, Oregon

GEORGE R. MINOT, M.D., Harvard University Boston

SIR FREDERICK G. BANTING, M.D., University of Toronto, Canada

FRANK H. LAHEY, M.D., Boston

Can you afford to miss such a program as this?

advanced and continuous effort to collect historical data and to honor members of the medical profession throughout the history of the state. McDowell and others have become widely known through these efforts though it may not be amiss to call attention to the fact that the woman upon whom McDowell performed his now-famous ovariectomy is buried in Indiana. Also, Dr. Jonathan Richman, who probably performed the first Caesarean section in the country west of the Allegheny Mountains, is buried at Rockville. Our neighborhood is far ahead of us in the matter of paying respect to its famous physicians.

THE Indianapolis *Times* is rendering a distinct and valuable service to Indiana folks in the publication of a series of articles regarding the pollution of our natural waters. The *Times* long has been an advocate of the preservation of these natural beauty spots which are sources of much pleasure to the thousands of disciples of Izaak Walton within our borders. The first of the series should be enough to awaken every Hoosier to the seriousness of the situation and command more than casual attention; it should result in a statewide demand that drastic measures be taken. This story concerned one of our Lake Michigan resort cities, a community with which we have been rather intimately acquainted for many years. Sanitary conditions, as affects the water supply and sewage disposal, are revolting, not to say anything about the health menace. Another story concerns the pollution of one of our most beautiful streams, in north central Indiana, the familiar strawboard factory story playing an important part therein. We commend the *Times* upon its stand and trust the present series may result in some definite action looking toward the restoration of one of the greatest benefits to man, the natural waterways.

WE HAVE commented on a new form of racketeering, that of collecting drug samples and reselling them. In a recent issue of the *New York State Medical Journal* is an editorial concerning still another racket, operated by what the editor is pleased to call "drug pirates." The New York city police unearthed a most nefarious business when they discovered a "plant" where more or less well known drugs and patent medicines were imitated, together with their labels, boxes, bottles and cartons. An examination revealed such incongruities as headache tablets made of talcum powder, colored and flavored water masquerading as cough syrup, and tinted and perfumed flour which was sold as high-grade talcum powder. Druggists who were paying approximately \$1.15 per ounce for ephedrine were offered a substitute for \$1.35 per pint, and so on throughout a very extensive list. The sorry part of all this is that there seems to be no law specifically covering the subject; that

is to say, the criminal code fails adequately to apply in such cases. From the fact that the racket has been thoroughly exposed in New York, it is more than probable that the operators not wishing to give up such a sinecure will seek other fields; it is within the realm of possibility that they may later invade Indiana and it would be well to be on the lookout for these or similar operators.

JUDGING from the repercussion following the broadside of the Board of Regents of the American College of Surgeons, the College is going to be a busy organization for the next few months, if it answers all the criticism levelled at its recent pronouncement regarding the development and conduct of a prepayment plan for medical and hospital service to persons of moderate means. Whether by accident or design, the fact that the statement was released by the College immediately prior to the session of the American Medical Association at Cleveland adds much of interest to the controversy. Just why a little coterie of men, even though they be the Board of Regents of the College, should undertake to act as the spokesmen for the physicians of North America is quite beyond us; we do not like it; the members of the College are resenting it, and even now are planning a meeting of protest. As we understand it, the purpose for which the College was founded was to elevate the standards of surgery in North America, and to educate the public to the fact that the practice of surgery calls for special training. To this was later added the standardization of our hospitals—all worthy reasons for the existence of such an organization. But when the College undertakes to assume direction of the entire profession of America, just then does its usefulness wane. We shall await with much interest the further actions of the Board of Regents, as well as of the entire official family of the College.

WE REPRINT herewith a letter from the Attorney General of Michigan, written to the editor of the *Detroit Medical News*, bulletin of the Wayne County (Michigan) Medical Society. This letter sets forth very clearly some pertinent facts about "expert" testimony and we believe it may be read with profit by our entire membership.

Dear Doctor Sugar:

The editorial on medical testimony which appeared in the April 23 issue of the *Detroit Medical News* and which was reprinted in *The Legal Record* of May 10, was particularly gratifying to me not only because it is a sound expression of the facts but also as indicating the awareness on the part of the medical profession of the legal situation. I have heard much medical testimony that impressed me as fair and sound; but I have also heard much that was suspect. I prefer to believe that most of the latter is due to natural bias rather than to any deliberate or even conscious desire to distort. Circumstances of our system of trial tend to produce partisanship in witnesses with the result that the disinterested witness



is a rarity. Yet scientific facts should by scientific men be presented with absolute impartiality.

Medical testimony is not readily available to the average citizen in his troubles.

Generally speaking, physicians are reluctant to be classed as expert witnesses and are only with difficulty brought to the court room. But, large commercial enterprises and insurance companies do not suffer thereby, for they have at their command the most helpful medical services. So important in the administration of justice is medical testimony that its fair and just presentation is a virtue.

I commend your editorial as indicating the sincere desire of your profession to eliminate such abuses as may come to the administration of justice from the medical witness. The medical witness is in a position to know the difference between a merely speculative inference and that which may be concluded with practical certainty; and, he should be scrupulous to convey with absolute candor the degree of certainty or uncertainty which, in view of his service, may be attached to his particular opinion.

Very truly yours,

PATRICK H. O'BRIEN,

June 22, 1934.

Attorney General, State of Michigan

"... the country will be wise to give attention to the report of the American Medical Association's Bureau of Medical Economics, which asserts that 'existing systems of insurance have failed to solve the problem of medical care for the people and have brought a great many evils along with some benefits.'

"There should be careful weighing of the Bureau's contention that no 'actuarial basis has ever been set up that has not been proved defective.' For it is well known that in countries having such forms of insurance, there has been a widespread movement to substitute for the insurance some form of compulsory saving, with payment of an immediate sum for medical services and the return of a portion of the unused savings for insurance needs.

"There are, to be sure, provisions for public sickness insurance in thirty-six countries, and many of them are of many years standing—in Germany, for example, since 1883—but Dr. Morris Fishbein, eminent American physician, warns us that he has studied the plans operative in twenty-three European nations, without finding one of them that has been 'established as a success.'"

The Fort Wayne *News-Sentinel*, July 17, 1934.

THE report of Maynard Austin, as chairman of the Committee on Health Insurance, presented at the conference of officers and committee chairmen, July eighth, is characteristic of the author and is passed on to the membership that all may have opportunity to enjoy it:

"As chairman of the Committee on Health Insurance, I regret that I have found nothing definite to report save that much literature has been written on both sides of this question, and all of it offered nothing new. As an evidence of a mountain giving birth to a mouse, we have the recent action

of the Michigan State Medical Society recommending, after two members of their committee had been sent abroad to investigate conditions in Europe, that \$118 a year be budgeted by every family with an income under \$1,500, apportioning \$27.88 for each person. This gave \$5 to the general practitioner, \$5 to the dentist, \$5 to the hospital, \$3 to the specialist, \$2.50 to the nurse, \$2 to the druggist, \$1 to the laboratory, and provided for a 10% overhead and a 5% surplus reserve. Twenty-two years ago I made a careful survey of ten years' work and suggested that a family could afford to budget medical expense and allow one week's wages to give ordinary medical care to a man and wife, with two days' wages added for each child. That was before the country became overburdened with hospitals, and the public made to believe that a seven-dollar-a-day nurse in a high-priced hotel room is required every time a physic is needed. Had we eliminated medical racketeering there would have been no hullabaloo Cost of Medical Care report. Unnecessary hospitalization, unnecessary laboratory work, unnecessary x-ray work and unnecessary services of so-called specialists, have brought about a repercussion, in which the ordinary conscientious physician must help the racket along, or run the risk of having a malpractice suit. Just as Wilson's war-to-end-war has ended in the demoralization of the country, morally, financially and spiritually, so will all these over-educated parasitic welfare workers drive the medical profession into looking for a job that will be politically controlled, and end in the same condition we find in every country in which Utopian plans for universal equality have been attempted. A man can afford only the things he has ability to earn the right to have. He is entitled to have only the things he can afford and can pay for. Few, if any, of the third of the population of the United States who have been the beneficiaries of our National Alphabetical Soup in the last year, will ever pay for medical, surgical, dental or hospital services again. A few years ago we turned up our noses at the lodge doctor who collected a dollar a month from his Night-Shirt Neighbors, and the Various Suckers who swam with the Mystic Knights of the Sea, but in the horizon there is a hill from which we may be able to look back and envy the dollar-a-month man. Three to five cent office calls and eleven to sixteen cent house visits are the prevailing fees of eighty-five per cent of the medical profession in all the countries outside of the United States and Canada, because politics has seduced the profession in Europe, in Russia, and in Cuba, and given those countries a bunch of bastard egoists, who not only have lost the confidence of the people, but are gradually losing faith in themselves.

*"The best health insurance is the friendship of a true physician, whose thought of pay is entirely secondary to meriting the respect and confidence of his patients."*

## THE PRESIDENT'S PAGE

### PRESIDENT NAMES SOCIAL PLANNERS

Committee on Economic Security Established  
to Prepare Legislation

WASHINGTON, June 30 (A.P.) — President Roosevelt yesterday afternoon established the committee on economic security to prepare the program of social legislation he recently advanced as the business for the next session of congress.

The committee includes Henry Morgenthau, secretary of treasury; Frances Perkins, secretary of labor; Henry A. Wallace, secretary of agriculture; Homer S. Cummings, attorney-general, and Harry L. Hopkins, federal relief administrator.

Mr. Roosevelt also authorized an advisory council for the special committee to include fifteen to twenty national leaders in the fields of labor, social welfare, industry and commerce, and state and local governments.

### TECHNICAL BOARD AUTHORIZED

A technical board to assist the committee in gathering and co-ordinating facts also was authorized.

The White House announcement said the advisory council would hold hearings to receive the views of interested groups. Subject matters will embrace all social problems including unemployment insurance and general public security.

"The chief problem to be attacked by the two new bodies," said the White House statement, "is the insecurity of the individual and the family which has become so characteristic of modern industrial and agricultural life and which threatens to become steadily more intense.

"The committees will study the hazards of unemployment, old age and unemployability, industrial accidents and occupational diseases, non-industrial sickness and disability, widowhood and the economic aspects of maternity."

It is the intention of the President to have this whole social program formulated for presentation to the federal, state and local governments next year.—*Indianapolis News*, June 30, 1934.

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Your president believes that the above, as copied from a newspaper, is self-explanatory and worthy of the attention and consideration of every member of the medical profession.

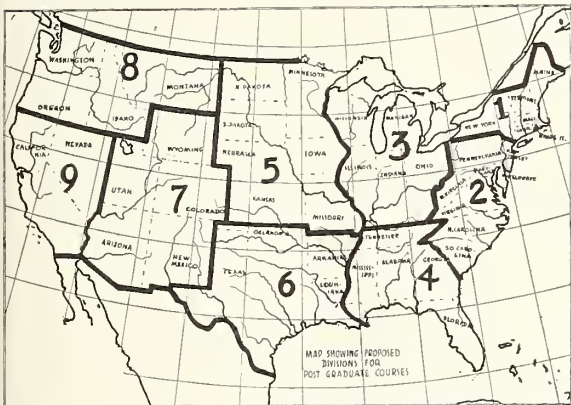
*E. E. Padgett.*



## A PLAN TO REGENERATE MEDICAL THOUGHT

A. M. MITCHELL, M. D.  
Terre Haute, Indiana

Since the A. M. A. is urging all state and county medical societies to have more postgraduate work, I believe that the A. M. A. should become the leader. The following plan is urged so that it can assume this position of leadership.



- District 1: New York, Vermont, New Hampshire, Maine, Massachusetts, Rhode Island, Connecticut.  
 District 2: New Jersey, Pennsylvania, Delaware, Maryland, Virginia, West Virginia, North Carolina, South Carolina.  
 District 3: Kentucky, Ohio, Indiana, Michigan, Illinois, Wisconsin.  
 District 4: Florida, Georgia, Alabama, Mississippi, Tennessee.  
 District 5: Missouri, Iowa, Kansas, Nebraska, Minnesota, North Dakota, South Dakota.  
 District 6: Oklahoma, Arkansas, Louisiana, Texas.  
 District 7: Arizona, New Mexico, Utah, Colorado, Wyoming.  
 District 8: Washington, Oregon, Idaho, Montana.  
 District 9: Nevada, California.

About 1908 the medical profession was somewhat "on the ragged edge." Organized medicine needed salvation. To accomplish this, the leaders of the medical profession sent Dr. A. T. McCormick out as a missionary. He visited practically every medical society in the United States, with the result that organized medicine was put back on its feet again. Dr. McCormick also promoted a postgraduate study course, published in the *A. M. A. Journal*, which stimulated the county medical societies to better scientific work.

Now again organized medicine seems to need stimulation. The philanthropists and the social workers are trying to tear the medical profession to pieces. If missionary work and postgraduate study were good things twenty-five years ago, why would not some such plan be good to use at the present time? Why would it not be a good thing if the United States were divided into several districts as shown on the map for the purpose of carrying on postgraduate work? (The divisions are provisional and are proposed to illustrate the

idea.) The American Medical Association could send a group of teachers into each district for this purpose once a year for a week of five days. This group of teachers should be from districts remote from the place of presentation. The only requirement for attendance should be that each physician be in good standing in his own county medical society, because under present economic conditions there are many physicians who cannot afford to travel great distances to attend meetings and clinics. The biggest expense would be in sending the teachers to the districts, and that should be borne by the A. M. A.; the least expense should fall on the physicians attending the course.

Details of such a plan could easily be worked out. The annual meeting of the A. M. A. could constitute the postgraduate course in the district where it is held. It is believed that this or some similar plan would promote harmony, and unity of thought, and would increase the membership in organized medicine. Postgraduate instruction taken to the physicians is just as important today as it was twenty-five years ago.

## SOME GENERAL DATA ON MATERNITY

### UNITED STATES

1. Of the estimated 2,000,000 or more women who bear children each year, 25,000 die as a direct or indirect result of child-bearing.
2. Today one child-bearing woman in 155 (6.5 per 1,000 b.) dies directly because of her pregnancy. Thirty years ago the rate was one in 133 (7.5 per 1,000 b.).
3. Seventy-five per cent of the complicating causes (infection, hemorrhage, toxemia) are controllable.
4. Today tuberculosis is the only disease which kills more women of the child-bearing age than child-bearing.
5. Adequate and efficient obstetrical care loses but one mother in 400 to 500 cases. Competent physicians cooperating with an intelligent public can reduce the loss to 1 in 1,000 cases.
6. Old line life insurance companies refuse to accept women applicants during their first pregnancy. One insurance applicant in seventeen reports a maternal death.
7. Approximately 700,000 abortions occur annually. One gestation in three terminates as an abortion before the seventh month.
8. Grossly one-half as many babies are born dead as die during the first year of life.
9. Adding 30 to 35%, the infant (foetal) loss before the seventh month of pregnancy, to the 15 to 20% infant loss (200,000 or more), represented by the stillbirths and those dying during

the first year, leaves but an approximate 50% of the originally conceived individuals to survive the first year of life.

10. Sixty per cent of abortions are criminal.

11. One woman in three having a criminal abortion is injured permanently. One in fifty dies.

12. The death rate from septicemia following abortion is seven times as great as that following confinements.

13. *Twenty-five per cent of all maternal mortality is caused by abortions.*

## INDIANA

### MATERNAL

1. During the past 10 years there were 636,666 births, and 3,497 maternal deaths.

2. During this same period, 1 child-bearing woman in 172 died an obstetrical death (5.8 per 1,000).

3. In 1913, 1 woman in 140 (7.1 per 1,000 b.).

4. In 1923, 1 woman in 167 (6.0 per 1,000 b.).

5. In 1933, 1 woman in 185 (5.4 per 1,000 b.).

6. During the past 10 years there were 281 more maternal deaths than all deaths of both sexes and all ages from diphtheria, typhoid and smallpox, combined.

7. During the past 10 years 1 woman in 70 was not attended by a physician during labor.

8. Today 1 woman in 5 is delivered in a hospital.

### INFANT

1. During the past 10 years 36,682 died before the end of the first year.

2. During this same period 17,896 were born dead (ratio 1 to 2), making a total loss of 54,578.\*

3. One live-born infant in 12 (11.6) did not live to be a year old.

4. In 1923, 67,192 (live and stillbirths) babies were born; in 1933, 51,856—a decrease of 22%.

## MARION COUNTY

### MATERNAL

1. During the past 10 years (1924-1933 inclusive) there were 74,814 births, and 555 maternal deaths.

2. During this same period one pregnant woman in 135 died an obstetrical death (7.4 per 1,000 b.).

3. In 1923 1 woman in 143 (7.0 per 1,000 b.).

4. In 1933 1 woman in 151 (6.6 per 1,000 b.).

5. During the past 10 years the total maternal deaths (555) was 225 in excess of all deaths (330) of both sexes of all ages from diphtheria, typhoid and smallpox. Stated otherwise, *for every 3 individuals dying from diphtheria, typhoid and smallpox, combined, there were 5 maternal deaths.*

6. Over a period of the last 5 years 16 counties showed a higher maternal death rate than Marion (7.1 per 1,000 b.). These 16 counties and their respective rates are as follows: Bartholomew, 7.2; Vermillion, 7.3; Vigo, 7.3; Daviess, 7.4; Noble, 7.4; Jefferson, 7.4; Clark, 7.7; Delaware, 7.8; Jay, 7.9;

Knox, 8.1; Vanderburgh, 8.1; Madison, 8.5; Cass, 8.7; Floyd, 8.9; Fayette, 9.0; Randolph, 11.3.

(In many instances these higher rates are, owing to improved obstetrical facilities, due to the more complicated cases being brought from adjoining counties. As an example, 60% of the maternal mortality at the Coleman Hospital at Indianapolis is derived from cases coming from without Marion County. However, it would seem that the rates of about half these counties are quite independent of that source, and that their explanation is fundamentally based elsewhere. It is noteworthy that the rate of one of the counties of the latter group is fully twice that of the state (5.4) for the same period of time.)

### INFANT

1. During the past 10 years (1924-1933 inclusive) there were 4,813 deaths under 1 year.

2. During the same period there were 2,441 stillbirths (ratio of 1 to 2), making a total infant loss of 7,254.\*

3. One live-born infant in 10 (10.3) did not live to be a year old.

4. In 1923, 8,087 (live and stillbirth) babies were born; in 1933, 6,546. A decrease of 19%.

(Allowing for the increased number of out-of-county cases delivered in Marion the last few years, this percentage corrected would be higher.)

## DIPHTHERIA REPORT FOR JUNE, 1934

There were five deaths from diphtheria in the month of June, 1934. Two of the deaths were laryngeal cases; one was the death of an adult who died of acute myocarditis. Another case was diphtheria complicated with scarlet fever, which is always a very dangerous combination, and another case was that of an adult, probably complicated with meningitis. We have been noticing for some time that nearly all the deaths were from such complications as these just mentioned. The profession needs to be particularly on the lookout for these forms of the disease.

For the first half of the year there have been forty-five deaths from diphtheria, which is the lowest number at the half way point that has ever been recorded. However, it is by no means as low as we should like, and in view of the usual high figures for the months of October, November, and December, we are inclined to be somewhat concerned. It was hoped that diphtheria deaths would fall below the one hundred mark for this year.

Below is a record of the deaths from diphtheria, according to counties. Allen county has another death, which puts it above every other county in the state in absolute numbers. Perry and Lawrence

\* These figures do not include the infant or foetal loss prior to the seventh month of gestation. Indiana law does not require registration of abortions or miscarriages.



counties, and probably some others, have higher rates. The only county to have two deaths for the month of June is Marion County. Randolph County enters the list for the first time this year.

County	June 1934	Total for 1934
Allen .....	1	6
Blackford .....	0	1
Delaware .....	0	1
Dubois .....	0	2
Gibson .....	0	1
Grant .....	0	1
Greene .....	1	2
Harrison .....	0	1
Jackson .....	0	2
Knox .....	0	2
Lake .....	0	2
Lawrence .....	0	4
Marion .....	2	5
Martin .....	0	1
Montgomery .....	0	1
Perry .....	0	4
Randolph .....	1	1
Spencer .....	0	2
Warrick .....	0	1
Vanderburgh .....	0	2
Vermillion .....	0	1
Wayne .....	0	2
Total .....	5	45

One hundred forty-eight applicants, including five osteopaths, took the Indiana medical examination June nineteenth, twentieth and twenty-first in Indianapolis. The examination was conducted by the full membership of the State Board of Medical Examination and Registration.

\* \* \*

CONVICTION OF TOWNSHIP TRUSTEE

The Indiana Supreme Court has affirmed the conviction of Erick Lund, former trustee of North Township, Lake County, on charge of filing false claims. Mr. Lund, who was sentenced to serve two to fourteen years in the state prison and fined \$1,000, was convicted in 1929 in the Lake County Criminal Court. The former trustee was charged with filing claims amounting to \$13,552.79 against the township poor funds in an illegal manner. His indictment followed an examination by the State Board of Accounts which charged him with paying exorbitant fees for medical and dental work for the township's indigents, and filing claims for work that never was done. The Supreme Court's opinion, affirming action of the county criminal court, was written by Judge Michael Fansler.

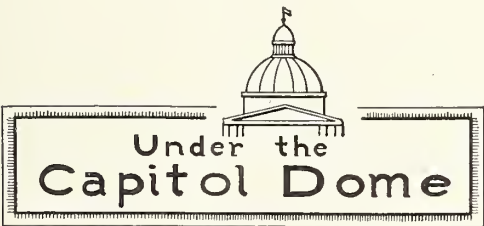
\* \* \*

1935 AUTOMOBILE PLATES

Indiana physicians will find the purchase of 1935 automobile license plates and drivers' licenses a simpler process than it has been in the past as the result of the installation of a new system by the State Bureau of Motor Vehicles. Under the new system the application for plates will be prepared from the records in the department and mailed to the vehicle owner. He will fill in his name, township and county, present the application to the branch office with the proper fee as indicated on the application, and exhibit his poll tax receipt. The clerk in the branch office will validate the certificate of ownership attached to the application, handing it and the plates to the applicant.

This process, according to Frank Finney, head of the license department, will eliminate the inconvenience caused in the past by long waiting in line at branch offices while applicants filled out the proper forms and the clerk typed the information on duplicate cards before the plates could be issued. Attached to the application will be two coupons retained by the bureau of motor vehicles, one for its files and the second to be used in compiling the lists of motor vehicles furnished township assessors. The plate application also will be accompanied by two application blanks for drivers' licenses, which can be filled out before the applicant goes to the branch.

Applications for 1935 motor vehicle plates and operators' licenses will be in the hands of the vehicle owners by December first of this year, Mr. Finney said.



PHYSICIANS' INCOMES

An estimated total income from practice in the medical profession for the years 1929 to and including 1932, prepared by Division of Economic Research of the Department of Commerce, Washington, D. C., shows that the average net income from practice for 1929 was \$5,602; in 1930, \$5,307; in 1931, \$4,544; and in 1932, \$3,442. A report regarding the national income in 1933 is in preparation.

\* \* \*

STATE BOARD OF MEDICAL REGISTRATION  
AND EXAMINATION

Members of the State Board of Medical Examination and Registration will meet early in September, Ruth V. Kirk, clerk of the board, has announced.

\* \* \*

Offices of the State Board of Medical Examination and Registration will be closed August second to sixteenth while Ruth V. Kirk, clerk of the board, is on vacation. In event of an emergency, information can be obtained from Dr. William R. Davidson, secretary, at Evansville.

## BARBERS' HEALTH CERTIFICATES

Indiana physicians have given health certificates to 8,060 barbers, 1,343 hair cutters, and 122 apprentices since the barbers' registration law became effective October 15, 1933. Of the total number of persons who applied for licenses, 161 failed to pass the required physical examination. The barbers' license law was passed by the 1933 Indiana General Assembly and created a board of three members to supervise the granting of licenses. In addition to the physical examination, applicants are required to pass a technical test to determine their qualifications.

\* \* \*

## NEW PRESIDENT OF STATE BOARD OF HEALTH

Dr. E. M. VanBuskirk, of Fort Wayne, was elected president of the State Board of Health at a meeting July sixteenth. He succeeds Dr. J. F. Glackman, of Rockport. Dr. VanBuskirk has been a member of the board approximately one year. Dr. Ernest Rupel, Indianapolis, is the third member of the board, and Dr. Verne K. Harvey, also of Indianapolis, is secretary.

\* \* \*

## SUCCESSOR TO MR. BOOK

Governor Paul V. McNutt still is looking for a successor to William H. Book, director of the State Unemployment Relief Commission. Mr. Book has resigned to become an executive vice-president of the Indianapolis Chamber of Commerce.

E. Arthur Ball, Muncie business man and chairman of the Delaware County relief organization, was offered the position by Governor McNutt, but he declined to accept it because of press of his own business affairs.

Howard Hunter, field representative of the emergency relief administration, recently has been in Indianapolis and conferred with Orla Heim, of Evansville, and Milton Salwasser, of Laporte, who are applicants for the post. Otto Jensen, an examiner for the State Board of Accounts, also has been considered for the post, as has Wayne Coy, undersecretary to Governor McNutt.

The person selected by the governor must meet the approval of federal officials. The state commission cooperates closely with the various federal relief agencies.

\* \* \*

## DIAGNOSTIC TESTS AND MEDICAL PRACTICE

The following inquiry and opinion, given by the attorney-general, will be interesting to many physicians. The letter is addressed to the clerk of the State Board of Medical Registration and Examination.

Dear Miss Kirk:

I have before me your letter of April 12, 1934, requesting a ruling as to whether anyone on his own responsibility, engaging in the performance of

diagnostic tests, is practicing medicine. My attention is called to a letter received by you which you passed on to this office, which letter, in part, says:

"The pathologists in the country are interested in trying to do something to stop laymen and technicians from practicing medicine in the laboratory form. As you may know, there are a large number of laboratories run by laymen and technicians. We consider that our work is a definite specialty in medicine and all over the country this movement is being started. . . ."

In order that the question before me be answered intelligently, it will be necessary for us to apply the statute on the definition of practice of medicine to the case in hand. Indiana decisions are numerous on the point that a statute must be construed strictly; hence, we must confine ourselves to the limitation set out in the statute itself in applying the same in answering your question.

Burns Statutes 1926, Sec. 12243, defines the practice of medicine as follows:

"To open an office for such purpose, or to announce to the public in any way a readiness to practice medicine in any county of the state, or to prescribe for, or to give surgical assistance to, or to heal, cure or relieve, or to attempt to heal, cure or relieve those suffering from injury or deformity, or disease of mind or body, or to advertise or to announce to the public in any manner a readiness or ability to heal, cure or relieve those who may be suffering from injury or deformity, or disease of mind or body, shall be to engage in the practice of medicine within the meaning of this act, etc. . . ."

Webster's New International Dictionary defines the word "diagnosis" as "the art or act of recognizing the presence of disease from its signs or symptoms, and deciding as to its character; also the decisions arrived at."

The same authority defines "analysis" as "the separation of compound substances of chemical process into their constituents." From the last two definitions, that of "diagnosis" and that of "analysis," it follows that an analyst practices medicine when he does more than report the constituent parts of a fluid. It also follows that he does not practice medicine when he simply makes his report of the constituent parts of this fluid.

Pursuing this thought further, it is our conclusion that this analyst, when, after having reported the component parts of this fluid, reports that the person is suffering from diphtheria or from some other disease, that analyst ceases to be such and places himself in the field of diagnosticians. When he does that, he comes within the spirit of the law as defined in the practice of medicine.

Finally, it is our conclusion that anyone on his own responsibility, engaging in the performance of diagnostic tests wherein said test report includes the conclusion of the analyst as to the form or manner or kind of disease with which the per-



son is afflicted, or in any manner prescribes or gives advice as to treatment, is practicing medicine and comes within the definition as set out in Burns' Revised Statutes 1926, Section 12243.

Very truly yours,

(Signed) PHILIP LUTZ, JR.,  
Attorney General.

## SECRETARIES' COLUMN

I see that the Milbank Foundation is playing the doctors in New Jersey. There are two plans in that state: a county plan, and a state plan. The county plan is run by the county medical society and is called the Medical Society E. R. A. It is cooperative. Local relief directors issue authorizations for medical care, physicians execute them, and the administration meets the cost. Fees are regulated in the agreement between the two organizations. "Gives free choice of physician. In the six months from September, 1933, to February, 1934, the E. R. A. expenditure for this kind of relief was \$168,991.00. This arrangement is temporary. It is supported from tax revenues administered by a government agency, it directly involves physicians and it provides for indigent unemployed and their families."

"The state plan is the Associated Hospitals of Essex County, Incorporated, which embodies a voluntary insurance plan. This is a permanent plan. Sixteen out of seventeen hospitals are members. They have 6,232 subscribers who pay eighty-five cents per month each to the organization. In return, each is guaranteed hospital service in the event of an illness requiring it. Maternity care and compensation cases are excepted. Provision for attendance by a physician is not a part of the Essex plan."

Neither of these plans are satisfactory to all the physicians in New Jersey. All that is now necessary to have state medicine in New Jersey is for the various foundations to interest the politicians, then with a little legislation, the physicians are hooked.

With all this going on, it behooves the physicians in Indiana to fight all the legislators who would favor such a plan.

The Yale School of Nursing will confer the degree of Master of Nursing with the class entering this fall. A statement said graduates of the school, because of their broader preparation, are in constant demand for teaching and administration in the institutional and public health fields. A baccalaureate degree is required for admission to the school. Will this course make them nurses or social workers?

Every county society secretary should study the proceedings of the House of Delegates of the A. M. A. as published in the last issues of the *Journal of the American Medical Association*. See the resolutions against the American College of Surgeons and the ten principles adopted for the medical profession.

This is vacation time. How many fish have you to your credit?

A. M. MITCHELL, M. D., *Chairman*.

## VOICE OF THE DOCTOR

### A VACCINE IN UNDULANT FEVER

Very little has appeared in the literature concerning vaccinotherapy in undulant fever. In 1929, an abstract review of an article dealing with the subject was published in the *Journal of the American Medical Association*.<sup>1</sup> The original article was by French writers. The writer has heard internists discourage the use of undulant fever vaccines, maintaining that very little if any good was done and sometimes bad reactions occurred.

Following is the report of a case of undulant fever (proven by positive agglutination tests treated successfully with such vaccine). Since a stock culture of *B. abortus bovis* could not be obtained by the laboratory making the culture, that of *B. melitensis* was used.

#### CASE REPORT

The patient, white, male, age 63, resident of a rural community, complained of asthenia, moderate loss of weight and night sweats for about a month prior to the time he was first seen. He had always been in good health prior to the present illness save for an attack of sciatica five years before. The family history was irrelevant.

The physical examination revealed: Temperature, 100 degrees; pulse, 92; slight generalized abdominal tenderness; and a sallow pallor. The heart, lungs, nose and throat were negative. Blood count and urine analysis were uninforming.

A temperature chart was kept day and night. The temperature was found to reach its peak, 101 to 102 degrees, shortly before or after midnight. There was seldom any fever during the day. Drenching sweats occurred each night from about one a. m. to six a. m.

Because there were two other cases of undulant fever in the neighborhood, blood was drawn and serologically tested at once at the central laboratory of the Indiana University hospitals. It was found positive in 1:600 dilution, and later to a higher dilution.

After about a week of bed rest and some sali-

cyte medications, the patient was not better. Since the other cases of undulant fever in the neighborhood had lasted about four or five months each, without vaccine, it was deemed wise to attempt the vaccinothrapy.

The vaccine was given subcutaneously every three or four days after the patient was first tested for sensitivity. The rule of giving only sub-reaction doses was followed, since the writer believed that reaction doses would only add insult to injury in an already very asthenic patient. The dose was started at one minim and gradually increased, about two minims each time, until a local and a slight focal reaction occurred. This was noted by the redness and soreness of the arm and a degree or so more temperature than would be expected three or four hours after the injection. The injection was given each time about 4:00 p. m. Any reaction temperature seemed to occur about 8:00 p. m., whereas the height of the disease fever was around midnight or after. When a slight reaction to the vaccine occurred, the dosage would be cut down about two minims or so for the next dose or two, then it would be cautiously increased.

The undulations of fever stopped gradually in about seven days. No more fever existed, although the temperature was taken every four hours, night and day, for another month. The sweats gradually abated although this symptom did not completely disappear until about two weeks after the fever subsided. The patient gradually gained weight and strength and was able to be out of bed one month after the vaccine was started. The vaccine was continued for four months. The patient continued well and had no relapses. He has remained well to this date, one year following discontinuance of the vaccine. No other medicine was given after the vaccine was started.

The writer wishes to thank Dr. Clyde Culbertson and Dr. Haines of the Central Laboratory, Indiana University hospitals, for the preparation of the vaccine and advice about its use.

W. L. SHARP, M. D., Indianapolis.

<sup>1</sup> Vaccine therapy in Undulant Fever: *Paris Med.*, p. 281. Review in *J. A. M. A.*, p. 1896, Vol. 92. June, 1929.

<sup>2</sup> Angell, Fred E.: *J. of Kansas Med. Society*, Vol. 30, No. 10. Oct., 1929.

## DEATH NOTICES

JEROME J. MANCHESTER, M. D., Indianapolis, died July second, aged seventy-seven years. Dr. Manchester graduated from the University of Vermont College of Medicine in 1890.

NORMAN F. PEACOCK, M. D., Darlington, died July eighth, aged sixty years. Dr. Peacock graduated from the College of Physicians and Surgeons,

Chicago, in 1897. He was a member of the Montgomery County Medical Society, the Indiana State Medical Association and the American Medical Association.

EZRA O. PRICE, M. D., of Ladoga, died in a Martinsville hospital, July third. Dr. Price was sixty-five years of age. He graduated from the Kentucky School of Medicine, Louisville, in 1889.

GEORGE A. WHITLEDGE, M. D., Anderson, died July fourth, aged sixty-four years. Dr. Whitledge graduated from the University of Louisville in 1891. He was a member of the Madison County Medical Society, the Indiana State Medical Association and the American Medical Association.

MILLARD H. FOSTER, M. D., of Indianapolis, was killed in an automobile accident at Three Rivers, Michigan, July first. For the past two months, Dr. Foster had been connected with the Battle Creek Sanitarium. He graduated from the Indiana University School of Medicine in 1926, and was a member of the Indianapolis Medical Society, the Indiana State Medical Association and the American Medical Association.

## HOOSIER NOTES

DR. T. E. CARNEAL, of Winamac, has remodeled his office building.

MISS ALTA WILCOX and Dr. Arthur H. Hansen, of Hammond, were married July eleventh.

DR. and MRS. O. A. HALL, of Montezuma, have moved to Eaton where Dr. Hall will practice.

MISS MARTHA JACOBS and Dr. William Schoolfield, Orleans, were married June twenty-third.

DR. F. MORSE NICHOLS is associated with Dr. W. O. Hildebrand, of Topeka, in the practice of medicine.

DR. GEORGE M. COOK, Hammond, is spending a month at the Peter Bent Brigham Hospital in Boston.

DR. CHARLES L. WISE has opened an office in Camden for the general practice of medicine and surgery.



MISS GERALDINE JEFFRIES, Newcastle, and Dr. U. B. Hine, Indianapolis, were married June twenty-fourth.

MISS MARY DICKSON, of near Robinson Chapel, and Dr. Emil Kenyon, of Carmel, were married June twenty-ninth.

MISS ALICE HELEN MUELLER, and Dr. James M. Pfeiffer, Lawrenceburg, were married in Lawrenceburg, June twenty-third.

DR. FRANK S. DOWNEY, of Dillsboro, has been commissioned a "colonel" on the staff of Honorable Ruby Laffoon, Governor of Kentucky.

MISS ESTHER MAY DELAWTER, Logansport, and Dr. Wilbur Irish, Hammond, were married December 20, 1933, and announced their marriage recently.

DR. GLADYS MARIE HILL, Indianapolis, has been appointed a staff physician at Madison State Hospital, to succeed Dr. Olga A. Hoffman, who died recently.

DRS. J. I. MITCHELL and I. E. Huckleberry, of Salem, are planning to erect a modern two-story brick veneer office building, which they expect to occupy this fall.

DR. W. S. DININGER has been appointed acting health officer of Randolph County during the absence of Dr. J. H. Moroney, who is spending the summer in the east and in Michigan.

#### SHOOTERS, ATTENTION!

The Committee for the Annual Trap Shooting Tournament is arranging an attractive program for Tuesday afternoon, October ninth, to be held at the Indianapolis Gun Club grounds. Appropriate prizes will be awarded winners. Class shooting and handicaps will give the beginners an equal chance with the "old timers." Detailed announcements will be made later.

DR. WILLIAM F. KING, Indianapolis, has been made president of the Indiana Affiliated Exchange Clubs. The election was made at the annual convention held in Muncie, June twenty-fifth.

AFTER attending the American Laryngological, the American Bronchoscopic and the A. M. A. meetings in Cleveland, Dr. William F. Molt, Indianapolis,

spent some time at the bronchoscopic clinic of Chevalier Jackson in Philadelphia.

DR. R. E. COLE, pathologist at Ball Memorial Hospital, Muncie, has resigned to open a private laboratory in the Western Reserve Building in that city. Dr. L. D. Montgomery, of Rochester, Minnesota, has taken over the hospital laboratory.

OFFICERS of the Indianapolis Board of Public Health were re-elected recently. They are: Dr. M. Joseph Barry, president; Dr. Leonard Ensinger, vice-president; Dr. Herman G. Morgan, secretary, and Dr. Charles W. Myers, superintendent of the City Hospital.

DR. MASON B. LIGHT, Indianapolis, went on a fishing trip recently, in Wisconsin. However, the fish failed to provide the greatest sport of his trip. On his return trip, along a narrow road and in a thickly-wooded area, a deer jumped from the roadside onto the radiator of his automobile. Dr. Light caught and killed the deer. And that is the best fish story that we have heard this year!

THE 1909 class of the Indiana University School of Medicine will celebrate its twenty-fifth anniversary Wednesday noon, October tenth, during the annual session of the Indiana State Medical Association. A dinner will be served at one of the Indianapolis hotels, to be selected later. Dr. W. A. Thompson, of Liberty, is in charge of arrangements. There were sixty-three graduates in the 1909 class.

THE Indianapolis Methodist Episcopal Hospital library has received a gift of sixty volumes of medical books from Mrs. John Henry Eberwein, of Indianapolis. The books belonged to her father, Dr. J. B. Clark, who practiced medicine for more than fifty years in Economy, Indiana. Among the group of books is one of outstanding historical value in that it represents a series of lectures given before the medical students in the University of Pennsylvania in the year 1859, and this book, autographed by the author, Dr. Clark won as a prize the year he graduated. Dr. J. William Hoffmann has presented the library with fifty volumes of medical books and Dr. R. O. McAlexander has donated thirty volumes together with about 250 medical magazines. Dr. David Sluss also has presented some books to the library.

THE third and probably the best annual dinner meeting of Committee Chairmen of the Indiana State Medical Association was held in Indianapolis, Sunday, July eighth. Reports were presented by each committee chairman. The following chair-

men, councilors and officers attended: W. H. Kennedy, Indianapolis; J. H. Weinstein, Terre Haute; J. W. Carmack, Indianapolis; Herman M. Baker, Evansville; Ernest Rupel, Indianapolis; O. T. Scamahorn, Pittsboro; E. M. Shanklin, Hammond; E. D. Clark, Indianapolis; A. F. Knoefel, Terre Haute; T. W. Oberlin, Hammond; A. M. Mitchell, Terre Haute; T. B. Rice, Indianapolis; M. A. Austin, Anderson; George D. Miller, Logansport; C. C. Bassett, Goodland; W. D. Little, Indianapolis; W. P. Garshwiler, Indianapolis; D. O. Kearby, Indianapolis; E. O. Asher, New Augusta; Russell Sage, Indianapolis; Larue D. Carter, Indianapolis; A. W. Cavins, Terre Haute; L. G. Zerfas, Indianapolis; H. C. Ragsdale, Bedford; O. O. Alexander, Terre Haute; Samuel Kennedy, Shelbyville; L. A. Ensminger, Indianapolis; F. T. Romberger, Lafayette; E. M. Van Buskirk, Fort Wayne; W. B. Christopher, Mishawaka; E. E. Padgett, Indianapolis; W. J. Leach, New Albany; H. G. Hamer, Indianapolis; R. L. Sensenich, South Bend; Don F. Cameron, Fort Wayne; H. H. Wheeler, Indianapolis; and Albert Stump, Indianapolis.

#### U. S. BIRTHS, INFANT MORTALITY, 1933

From the Department of Commerce, Bureau of the Census, Washington, D. C., we have received provisional figures for live births, infant mortality, and stillbirths, in continental United States, in 1933.

The Bureau of the Census announces that in continental United States, during the calendar year 1933, there were 2,064,944 births, 120,199 deaths of infants under one year of age, and 76,837 stillbirths. These figures represent a birth rate of 16.4 per 1,000 population, an infant mortality rate of 58.2 per 1,000 live births, and a stillbirth rate of 3.7 per 100 live births. In 1932 the corresponding rates for the birth registration area, which did not then include Texas, were 17.4, 57.6, and 3.8. The birth rate for 1933 is the lowest reported since the federal birth registration area was established in 1915, when it included only 10 states and the District of Columbia. The area has been gradually extended since then by the inclusion of other states until, with the admission of Texas in 1933, it included for the first time the entire area for the continental United States.

New York, Pennsylvania, Texas, and Illinois lead the states with the greatest number of births, respectively, as follows: 187,139; 157,046; 107,924; and 106,861. The states with the highest birth rates per 1,000 population, however, are: New Mexico, 26.7; North Carolina and Utah, each 22.9; South Carolina, 22.7; Mississippi, 21.6; Alabama, 21.1; and Virginia, 21.0—all Southern States except Utah, and all largely rural. The lowest birth rates are for Oregon, 12.2, and California, 12.4.

Infant mortality rates, which are based on the number of deaths of infants under one year of age per 1,000 live births, are excessively high in New

Mexico (134.2), and Arizona (111.4)—both states with large nomadic Indian and Mexican populations which have little knowledge of infant care. The next highest rate is 78.4 for South Carolina—a Southern State with a large Negro population. The lowest rates reported are those for Washington and Oregon, 38.9 and 39.3, respectively.

The ratio of stillbirths per 100 live births was 3.7 for the United States. Comparisons between the states as regards this ratio should be made with caution, as there is no single definition of stillbirths in general use and the application of the term varies widely in the law and practices of the different states.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories

Mixed Ragweed Pollen Extract Decimal Dilution Set

Mallinckrodt Chemical Works

Hippuran

Hippuran (Crystals) 12 Gm. vial

Sterile Solution Hippuran 25 cc. size

Wm. S. Merrell Company

Diothane

Diothane Crystals

Diothane 10% Solution

Parke, Davis & Co.

Ampoules Thio-Bismol, 2 Gm.

Tuberculin for the Mantoux Test

S. M. A. Corporation

Carotene—SMACO

SMACO Carotene in Oil

SMACO Carotene with Vitamin D Concentrate in Oil

SMACO Vitamin D Concentrate in Oil

SMACO Carotene and Vitamin D Concentrate in Cod Liver Oil

Winthrop Chemical Co., Inc.

Diodrast

Diodrast Sterile Solution (35 per cent, weight/volume), 10 cc. size

Diodrast Sterile Solution (35 per cent, weight/volume), 20 cc. size

The following product has been accepted for inclusion in the list of articles and brands accepted by the Council but not described in N. N. R.:

Stevenson's Mineral Oil Co.

Stevenson's Heavy Russian Mineral Oil (Mint Flavored)

## INDIANA UNIVERSITY NEWS NOTES

For the first time in the history of the Indiana University School of Medicine, the department of pharmacology is offering its regular course of instruction in pharmacology and toxicology during the summer term. The course consists of 80 lectures, 16 laboratory periods of four hours each, and 16 conferences of one hour each. Dr. J. E. Weatherby is in charge of the course.

A GIFT of 41 medical volumes was presented recently to the Indiana University medical library



by Dr. Clement C. Collins of Roachdale. Dr. Collins has practiced in Roachdale since his graduation from the Louisville Medical School in 1892. A number of the volumes are old enough to be of historical interest and include editions which were not represented formerly in the library, according to Allan Hendricks, Indiana University medical school librarian.

DR. GEORGE WYMAN WILLISON, of Dale, who received the doctor of medicine degree at the recent commencement exercises of Indiana University, was awarded the Ravdin medal, which is given annually by Dr. M. Ravdin, Evansville, to the member of the senior class of the Indiana University School of Medicine, who makes the highest average in the four-years' course for the M. D. degree.

THE following members of the Indiana University School of Medicine, junior and senior classes, were elected to Alpha Phi Omega, honorary medical scholarship society: Paul B. Arbogast, Bloomington; Max D. Garber, North Manchester; Vernon K. Pancost, Elkhart; Philip Shipper, New York, N. Y.; Thomas K. Tower, Leavenworth; Donald J. Wolfram, Brownsburg; Edward Efrogmson, Indianapolis; William Gitlin, Bluffton; Thomas Jones, Indianapolis; Harold Nisenbaum, Indianapolis; Wilbur Shortridge, Medora.

THE following doctors have been appointed resident physicians for the three Indiana University hospitals in Indianapolis for the year beginning July 1:

Dr. Olga M. Bonke, pediatrics, Riley Hospital; Dr. E. W. Cullipher, orthopedics, Riley Hospital; Dr. Horace Harrison, medicine, Robert W. Long Hospital; Dr. Keith Hepburn, surgery, Robert W. Long Hospital; Dr. F. G. Heimlich, dental surgery; Dr. Robert E. Lyons, Jr., cardiology; Dr. Russell G. Zimmerman, assistant in surgery; Dr. Ralph J. McQuiston, eye, ear, nose and throat; Dr. Dennis Megenhart, assistant in surgery; Dr. Howard Cogswell, assistant in surgery; Dr. Wayne R. Glock, assistant in orthopedics, Riley Hospital; Dr. C. V. Kierzkowski, Cuday, Wis., assistant in pediatrics, Riley Hospital; Dr. W. Alfred Kemp, obstetrics, William H. Coleman Hospital; Dr. James R. Reeves, pathology, and Dr. Edith Boyer Shuman, resident at large to assist Dr. Harrison at Long Hospital.

Internes for the three Indiana University hospitals for the year beginning July 1 will be as follows:

Dr. Ben T. Blackwell, Dr. Melvin Durkee, Dr. Florence Falvey, Dr. Max D. Garber, Dr. Maurice E. Glock, Dr. James H. Hawk, Dr. Robert E. Jewett, Dr. David H. Levy, Dr. James S. McElroy,

Dr. Fred Malott, Dr. Vernon Pancost, Dr. Edgar Richardson, Dr. Lillian E. Scheib, Dr. David Sher, Dr. T. Kermit Tower, Dr. Charles Tompkins, Dr. William C. Vance, Dr. Robert Webster, Dr. Aubrey Williams, Dr. Don J. Wolfram, and Dr. Harold Zwick.

With the exception of three, the newly appointed internes received their M. D. degrees this June from the Indiana University School of Medicine. Dr. Blackwell was awarded his M. D. degree from the University of Texas Medical School, Dr. Sher by the University of Minnesota School of Medicine, and Dr. Tompkins by the Nebraska College of Medicine.

SOCIETIES AND INSTITUTIONS

COUNTY SOCIETIES

GIBSON COUNTY MEDICAL SOCIETY members attended a fish fry in Owensville, July ninth.

\* \* \*

GRANT COUNTY MEDICAL SOCIETY members met at the nurses' home of the U. S. Veterans' Hospital, Marion, to hear members of the staff at the hospital. Subjects were "Multiple Sclerosis and Encephalitis Lethargica," "Dementia Praecox," "Tuberculosis in Neuro-Psychiatric Cases," "Mental Deficiency and Epilepsy" and "Manic-Depressive Psychosis."

\* \* \*

JAY COUNTY MEDICAL SOCIETY met at the Portland Country Club, July sixth. Dr. C. G. Culbertson, Indianapolis, was the principal speaker.

\* \* \*

LAWRENCE COUNTY MEDICAL SOCIETY held its regular monthly meeting at Bedford, July eleventh. Dr. L. H. Allen read a paper on "Diarthera."

\* \* \*

NOBLE COUNTY MEDICAL SOCIETY held its annual Luckey Day on July seventeenth, at Luckey Hospital, Wolf Lake.

\* \* \*

PARKE-VERMILLION COUNTY MEDICAL SOCIETY members were hosts to the Fifth District Medical Society at Turkey Run, June twenty-third.

\* \* \*

TIPTON COUNTY MEDICAL SOCIETY met at Tipton, June twenty-eighth. Dr. H. O. Mertz, Indianapolis, was the principal speaker, his subject being "Kidney Complications in Pregnancy." This was a dinner meeting.

\* \* \*

WHITLEY COUNTY MEDICAL SOCIETY members held a picnic, July seventeenth, at the log cabin summer home of Dr. and Mrs. E. V. Nolt at Crooked Lake.

FIFTH DISTRICT AND PARKE-VERMILLION COUNTY

The fifth district and the Parke-Vermillion County Medical societies, with the latter as host, met at Turkey Run Park Hotel in June.

During an afternoon meeting, beginning at 5:00 o'clock, Dr.

W. W. Bauer, Chicago, presented an effective address, emphasizing the borderline between the laity and the medical profession in present-day health work.

Before dinner there was time to enjoy the beauty of the park and to extend acquaintances. At 7:30 a chicken dinner was served, following which after-dinner talks were made. Dr. E. E. Padgett, Indianapolis, brought out the point that there is no need for a third party in the practice of medicine—the doctor and the patient are the essentials. Dr. Joseph Weinstein, Terre Haute, and Thomas A. Hendricks, Indianapolis, made short talks. The last speaker was Dr. George E. Brown of the Mayo Clinic, who presented a summary of the progress made in experimental work in nerve section for the relief of hypertension of functional nature. This promises to become a valuable contribution to the surgical treatment of this pathological condition in the active group of from twenty-five years to fifty years of age.

I. D. WHITE, *President*,  
W. D. GERRISH, *Secretary*.

#### MEETING OF THE AMERICAN ASSOCIATION OF SCHOOL PHYSICIANS

SARATOGA SPRINGS, NEW YORK, JUNE 26, 1934

The annual meeting of the American Association of School Physicians was held this year at Saratoga Springs, New York, at the same time that the health officers of the State of New York met for their annual get-together. The program was of unusual interest this year and well worth the time of any physician who does school work.

Noteworthy from the standpoint of Indiana medicine was the session of the evening of June twenty-sixth. First on the program was Dr. Haven Emerson, president of the American Public Health Association, who spoke at some length, pointing out the fact, so much emphasized recently in Indiana, that school physicians as well as other physicians should make special preparation for their work and should conduct themselves in accordance with the principles of medical ethics and practice. He pointed out that while the school physician can do much in the way of prevention and inspection, he can do little in the way of treatment and full diagnosis, this being properly left to the family physician.

The second speaker was Dr. Thurman B. Rice, Professor of Bacteriology and Public Health of the Indiana University School of Medicine, who spoke concerning the "Indiana Plan" of coordinating health work. The "Indiana Plan" is receiving a great deal of attention, and Dr. Rice was specifically asked to present a paper on that subject. He was also appointed one of the board of editors for the *Journal* which the organization publishes.

The third speaker was Dr. W. W. Bauer of the American Medical Association, who pointed out the function and the opportunities of organized medicine in public health work and in school medical care.

Altogether, the meeting was one that could be considered very successful, there being approximately sixteen hundred persons present, practically all of them being school doctors and school nurses. Physicians who do school medical work should, by all means, become members of this splendid group. Membership is limited to physicians, and entitles one to receive the *Journal*. The annual fee is \$2.00. Nurses may receive the *Journal* for \$1.50. The *Journal*, issued monthly, contains a great deal of valuable material for those interested. Address correspondence to William A. Howe, M. D., State Department of Education, Albany, New York.

#### INDIANA DIVISION OF PUBLIC HEALTH MAY DAY REPORT

In reply to a copy of the report of our May Day activities, the American Child Health Association director of medical service wrote a letter from which the following paragraph is quoted:

"I have received your letter of June twenty-seventh with the excellent report of May Day work. I know that the report does not include all of the work done throughout the

state, but even so, it shows much accomplished. I think the most hopeful thing of all is the interest taken by so many of your county medical societies in the plans for a year-round health service for the children."

Following is a copy of the report:

#### REPORT ON MAY DAY—CHILD HEALTH DAY IN INDIANA

BUREAU OF HEALTH EDUCATION, INDIANA STATE DIVISION  
OF PUBLIC HEALTH  
BYNUM LEGG, *Director*

Dr. O. N. Torian, having been appointed state May Day chairman by the director of the Division of Public Health, discussed plans before a meeting of the members of the Health Council for a state-wide celebration of the day. These plans were carried forward by the Bureau of Health Education in cooperation with local medical societies, schools and child welfare organizations in all counties in the state.

A May Day bulletin was issued by the Bureau of Health Education, outlining plans, suggestions and instructions for local county celebrations. The May Day issue of the *Monthly Bulletin* of the Division of Public Health, containing the proclamation by Governor McNutt and articles on May Day, was published.

Copies of our bulletin were sent to the secretaries of all county medical societies, who in turn appointed local lay committees to take charge of the activities. Copies were also sent to all individuals, organizations, and schools requesting them, totaling approximately 500.

During May report blanks were sent out to all persons who had requested material and to secretaries of medical societies, asking them to fill out and return reports to us along with May Day publicity from their local papers. Many counties where observances were held have not sent in reports, but to date we have received the following:

#### CARROLL COUNTY

##### *Delphi—Superintendent of Schools*

In connection with annual exhibit and visiting days, May 1-2, a health and May Day program was arranged. A number of health posters were made. Proposed to emphasize health habits among children.

##### *Flora—Secretary of County Medical Society*

A committee appointed by the society and the different organizations were notified that when they wanted a speaker on any subject the Carroll County Medical Society would furnish one.

##### *Delphi—County Public Health Nurse*

County Medical Society issued a bulletin to all clubs, doctors, and dentists in county. Endeavored to get each club to inform itself about some one phase of child health and to do something about it in the community throughout the year. No special program on May Day but programs at regular May club meetings. Several requests for speakers, but no formal report as yet.

#### CLINTON COUNTY

##### *Frankfort—Women's Christian Temperance Union*

Cooperated with American Legion Auxiliary, Mother's Club, Child Study Club. Education concerning child health and protection. A child welfare program, including health playlet, was presented. A proclamation was issued by the mayor.

#### DELAWARE COUNTY

##### *Muncie—Visiting Nurse Association*

Chairmen of nursing and publicity committees had charge of activities. Year's accomplishments were reported. Ministers mentioned Child Health Day in their Sunday programs. The association sent 48 letters to various organizations doing child welfare work, inviting them to write news stories on their particular service for the May Day child welfare special edition of the *Muncie Evening Press*. Twenty-four responded. A sixteen half-page edition was printed.



## DEKALB COUNTY

*Auburn—County Medical Society*

Program headed by DeKalb County Medical Society through the county Red Cross nurse. All churches cooperated. Proposed to encourage health medical supervision for children, babies, and mothers. There were window displays in merchants' windows of health clothing, etc., with placards in bold type setting forth these aims. The public commented on the fact that the doctors were backing health movements.

## FAYETTE COUNTY

*Connersville—County Nurse*

Secretary of County Medical Society had charge of county program. Parent-Teacher groups cooperated. Purpose was correction of physical defects, an interest in keeping communicable diseases under better control, and protection against smallpox. Each school had a health program on May 1. All schools had track meet the following day. These programs were reported in local papers. Accomplished greater interest in health projects and increase in dental corrections.

## FOUNTAIN COUNTY

*County Nurse*

County-wide program at some central location was planned, but was called off because of prevalence of communicable diseases in the schools. Plan to have it later.

## GIBSON COUNTY

*County Medical Society*

Sponsored immunization program.

## HENRY COUNTY

*Spiceland—W. C. T. U.*

Instruction in scientific temperance and health in public schools.

## JAY COUNTY

*Portland—Business and Professional Women*

Chairman of Public Relations of Jay County B. and P. W. Club was named local chairman for May Day by president of Jay County Medical Society. Called meeting of superintendent of schools, teachers, representatives of various clubs interested in child welfare activities. Cooperation was secured from Visiting Nurse Association, Ministerial Association, County Medical Society, Rotary, Kiwanis, city schools, American Legion and Auxiliary, Boy Scouts, Girl Scouts, Tri Kappas, and P.-T. A.

Health talks were given in the schools and at various group meetings. Special addresses were given for Boy Scouts, Parent-Teachers, Kiwanis, Rotary, Camp Fire Girls and mothers, junior and senior high schools. Copies of the Children's Charter were distributed at various meetings and enlarged copy was presented to public library by B. & P. W.

Publicity was good, mostly front page. Community was aroused to better realization of the importance of child health and welfare, the need for recreation and play, the value of immunization against disease and an interest in the children of the community as its future citizens was awakened.

## LAKE COUNTY

*East Chicago—Public School Nurse*

City organization included medical profession, child welfare groups, women's clubs, schools, etc. All civic groups cooperated with these organizations, also most luncheon clubs. Proposed to prevent spread of communicable diseases. Pamphlets were distributed and school activities centered around this topic. A May Day dinner was sponsored by Kiwanis and Lions Clubs at which a public health physician spoke. Parent meetings in eight centers were addressed by physicians. It is believed that parents and children were well educated as to the spread of contagion and meaning of quarantine.

*Hammond—Health Commissioner*

Meeting called on April 26 by health commissioner. Plans discussed and publicity committee appointed. Attending meeting were public health nurses, chairmen of medical and dental educational committees, members of health department. Pub-

lic and parochial schools cooperated, also medical society, dental society, Chamber of Commerce, press, County Tuberculosis Association and radio station WWAE.

Proposed to promote community health, with special emphasis on child health during week of April 3. "Health Topics" a column of health subjects appeared daily in *Hammond Times*. A fifteen minute broadcast daily over station WWAE. Poster exhibits displayed in prominent places. Sixty-four health talks in all schools by members of medical and dental societies. Dental films shown in 10 schools. May Day pageant by children of grades one and two of Washington School at Harrison Park. Epidemiologist of State Board of Health was guest speaker at Chamber of Commerce luncheon on May 3.

An unusual interest in the general care of health and teeth was enlivened in the minds of parents and children alike by the intensive educational program covering all phases of health education under supervision of health commissioner.

## LAPORTE COUNTY

*Michigan City—School Physician*

Child Health Day was observed in all public schools. Parent-Teacher Associations asked for several health talks throughout the year. Proposed to bring all school children into weight zone, to have all immunized against smallpox and diphtheria, to see that all had dental attention. May Day health baskets were distributed. United States Public Health and American Dental Association dental survey helped dental percentages.

## LAWRENCE COUNTY

*Bedford—Secretary County Medical Society*

A committee in the medical society on child welfare and health cooperated with all civic organizations, urging pre-school examinations, furnishing speakers, etc. The Parent-Teacher organization, Rotary and Kiwanis Clubs assisted. Activities were pre-school round-up, immunizations, and pre-natal care. The county medical society divided into groups, examining pre-school children during May 5-19. A speakers' bureau was organized. The examinations were very successful and largely attended.

## MARION COUNTY

*Indianapolis—County Child Welfare Chairman, Medical Society*

The program in Marion County was largely one of publicity. On April 19 a mass meeting was called of every organization in the county having any interest in child health or welfare to formulate plans for observance in the various groups. A special publicity writer was engaged and all newspapers carried feature stories on child health and the activities of organizations working for the better health of children throughout Child Health Week. On May 2 the *Indianapolis News* issued an eight-page half sheet section devoted to "Their Majesties," the children. No literate citizen of Marion County could have failed to have his attention called to the importance of child health.

## MIAMI COUNTY

*Perru—Secretary County Medical Society*

A committee was appointed by the medical society consisting of school officials, chairmen of Parent-Teacher organizations, who appointed sub-committees to arrange program. Cooperation of the medical society, dental society, P. T. A., and schools was enlisted. Health talks on nutrition, posture and care of the teeth were given in the schools.

## MONROE COUNTY

*Bloomington—Executive Secretary, Board of Children's Guardians and County Bureau of Social Agencies*

Cooperation given by Public Health Nursing Association, American Legion Auxiliary, Parent-Teachers, Board of Children's Guardians, Family Welfare Society, Red Cross, schools—city and rural, County Medical Society, County Tuberculosis Association, all individuals and clubs interested in the welfare of the children and the future generation.

Aims in view were health, nutrition, improved standards in home life, education of parents and guardians, adequate relief—

food, shelter, clothing. The spiritual life of the community—church and Sunday School.

May 1st was observed as Child Health Day in regional conference of Board of Children's Guardians, nutrition school and camp—visiting nurses. Health conferences for the pre-school child on last Thursday of the month. Follow-up services in the homes.

Programs emphasized the fact that the children are our future generation and in order to improve our population the care of the children is paramount.

#### OWEN COUNTY

##### *Spencer—Public School Nurse*

May Day observed in grade schools assisted by high school students with purpose of arousing community interest, and especially that of parents of school children. Posters were made and placed in downtown windows.

#### PERRY COUNTY

##### *Cannelton—Superintendent of Schools*

Physical education night showing health activities of school from first grade throughout high school. Drills showing the type of habits formed and also many exhibitions by various departments.

##### *Cannelton—County Health Commissioner*

Various child health and May Day programs were held in towns of any size in this county. Quite an interest exhibited in these annual events which include gym revues, dances, etc.

#### ST. JOSEPH COUNTY

##### *South Bend and Mishawaka—Child Welfare Chairman, County Medical Society*

County committee of about twenty, composed of heads of welfare organizations, Parent-Teacher Associations, etc. Enlisted cooperation of County Medical Society, Parent-Teacher Council, Anti-Tuberculosis League, Children's Dispensary, Infant Welfare, Red Cross, Catholic Mother's Study Groups.

Community is quite well organized for year-round child welfare work. During this week emphasis was placed on child health talks given to most P. T. A. groups, Catholic Mothers' Study Groups and participation in Summer Round-up in five schools. In some schools in addition to talks child health plays were given.

#### VIGO COUNTY

##### *Terre Haute—Secretary County Medical Society*

Medical society put on a 30 minute radio program over station WBJW consisting of four piece string ensemble, reading parts of the Children's Charter, reciting poem "When Father Takes a Walk With Me," and reading of the paper furnished by the A. M. A.

Health examinations of infants and children. Society furnished speakers for three Parent-Teacher talks.

#### WABASH COUNTY

##### *Wabash—Secretary of County Medical Society*

May Day chairman appointed. County medical society, Parent-Teachers and W. C. T. U. cooperated to make parents health conscious. Talks given by physicians to above groups.

### BUREAU OF COMMUNICABLE DISEASES

#### Monthly Report, June, 1934

Diseases	June 1934	May 1934	April 1934	June 1933	June 1932
Tuberculosis .....	190	150	84	130	315
Chickenpox .....	80	183	395	192	269
Measles .....	2,033	5,036	3,953	587	468
Scarlet Fever .....	233	461	72	214	183
Smallpox .....	6	8	2	8	47
Typhoid Fever .....	34	21	28	69	31
Whooping Cough .....	265	266	413	325	334
Diphtheria .....	40	48	68	52	61
Influenza .....	30	56	73	81	33
Pneumonia .....	18	16	31	19	18
Mumps .....	13	53	50	96	236
Pollomyelitis .....	1	4	1	3	0
Meningitis .....	3	3	6	10	18

THURMAN B. RICE, M. D.

### THE INDIANA STATE MEDICAL ASSOCIATION THE EXECUTIVE COMMITTEE

July 8, 1934.

Roll call showed the following present: W. H. Kennedy, M. D., chairman; H. H. Wheeler, M. D.; E. E. Padgett, M. D.; O. O. Alexander, M. D.; W. J. Leaeh, M. D.; E. M. Shanklin, M. D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary.

The monthly statements of receipts and expenditures in May and June and the report of the budget for May and June for the association committee and THE JOURNAL were presented.

#### *Membership Report*

Number of members on July 7, 1934.....	2,621
Number of members on July 7, 1933.....	2,516
Gain over last year.....	105
Number of members on Dec. 31, 1933.....	2,712

#### *Actions Left Over from 1933 Session, French Lick*

##### (1) Codification of Constitution and By-Laws.

(a) First draft submitted by Dr. Wishard, Dr. Weinstein and Dr. Cavins to members of Executive Committee and key men. Certain suggestions made to special committee which will have a meeting shortly to make final recommendations as to changes which will be printed in the September number of THE JOURNAL.

(2) No report as yet upon Dr. Weinstein's recommendation in regard to the University hospitals. Dr. Jett and Dr. Crockett are on this committee. Report expected later in the year.

(3) Suggestion that search be made through records, charter, and other sources in regard to the legal status of pay beds in the Long and Coleman hospitals referred to the chairman of the Public Relations Committee at last meeting of the Executive Committee. Dr. Garshwiler addressed a communication to the committee referring it to his annual report of last year.

#### *1934 Annual Session in Indianapolis*

Copy of scientific program which is practically complete given to members of Executive Committee.

Selection of badgés to be made at next meeting of committee.

Moving pictures at state meetings. Letter from Dr. Wyeth brought to the attention of the committee. The committee instructs Dr. Alexander to meet with Dr. Wyeth and make complete arrangements in regard to taking and preserving moving pictures at the coming meeting of the State Association. This is to be done annually.

Request of Dr. O. N. Torian, chairman of the State Child Health Committee, for a meeting of the child health district chairmen at 2 o'clock Tuesday, October 9, at the Claypool, the first day of the annual meeting, brought to the attention of the committee. The Executive Committee was very glad to give its approval to this meeting.

Invitation received from Lake County Medical Society for the 1935 meeting.

#### *American Medical Association Meeting at Cleveland, June 11 to 18*

(1) Resolution of the American Medical Association against the action taken by the American College of Surgeons promoting sickness insurance brought to the attention of the committee.

(a) Letter from Dr. M. T. MacEachern, director of Hospital Activities of the American College of Surgeons, brought to the attention of the committee.

(b) Resolutions concerning the resignation from the College of Surgeons prepared by Dr. Joseph Weinstein, past president of the association, brought to the attention of the Executive Committee. The Executive Committee felt that this did not come under its domain, but it is entirely a matter up to the members of the College of Surgeons in Indiana.

(2) Report made that Indiana delegates laid foundation for inviting the meeting to Indianapolis in 1936.

(3) Conference Committee on Medical Service. As suggested in the resolution introduced by the Indiana delegates.



the American Medical Association has appointed a conference committee on medical service, whose duty it is to contact the labor leaders and employers' groups of the country and present to them the facts in regard to certain forms of health and sickness insurance. Dr. R. L. Sensenich, who introduced the resolution in the House of Delegates, appeared before the Executive Committee, and the Executive Committee could his plan of action which recommended that an Indiana committee be appointed by the president to carry on this work here in the state.

#### *Transient Indigent Bureau*

Report made that Edward DiBella, head of the transient indigent service in Indiana, made a call upon the president of the association and the executive secretary and expressed his desire to cooperate with the medical profession.

#### *Court Decision on Vaccination*

Clipping given to Albert Stump who is to get this decision and write it up for THE JOURNAL. Decision not yet obtained by Mr. Stump.

#### *Industrial Diagnostic Service of the Chicago Dental Society*

Information concerning this service is being obtained and will be presented at the next meeting of the committee. The report upon this service is to appear in the July numbers of *Oral Hygiene and Dental Digest*. It is thought that perhaps methods used for that service might be applicable to medical services.

#### *Social Insurance*

Correspondence with Washington in regard to the reported proposal for sickness insurance, letter from Dr. Olin West, and article which appeared in the *Indianapolis News* in regard to social insurance by the president, brought to the attention of the committee.

#### *Report of Bureau of Venereal Diseases*

Dr. Verne Harvey appeared before the committee and made a personal informative presentation of the report of the work being done by the Division of Public Health in the campaign against venereal diseases. The suggestion was made that Dr. Harvey prepare an editorial note upon this subject for the next issue of THE JOURNAL and that from time to time notes appear in THE JOURNAL keeping the profession informed as to the new arrangements for this work.

#### *Suggestions for Committee on Recodification of Constitution and By-Laws*

(1) In addition to Dr. Davidson's suggestion that no physician should receive malpractice defense for services rendered under the influence of liquor, the same should apply to narcotics, so that this amendment will read, "under the influence of either liquor or narcotics."

(2) No physician can belong to his local county medical society without belonging to the Indiana State Medical Association. In a number of counties physicians may belong to the county medical society without joining the state association. The Executive Committee feels that this is not fair and that such practice should be discontinued.

(3) Every county medical society should have its own Constitution and By-Laws and should be required to file a copy at the headquarters office and to notify the headquarters office of any amendments that are made from time to time. Thus, a complete file of the constitutions and by-laws of all the county medical societies will be on hand at the headquarters office.

#### *Establishment of State Clinics for Mental Hygiene Cases*

The Committee on Mental Health at a meeting on June 25 rejected Dr. Max Bahr's plan, copy of which has been presented to the Executive Committee. The Committee on Mental Health, however, adopted a motion that a general study of the problem should continue and the chairman, Dr. Larue Carter, should have the authority to call a meeting at a later date at which time a definite recommendation and plan is to be submitted to the Executive Committee.

A report by Dr. Frank Hutchins of the Neuropsychiatry Department of the Indiana University School of Medicine was brought to the attention of the Executive Committee. Copies of this report were to be sent to the members of the Executive Committee and the Committee on Mental Health.

#### *Request of Nurses for Shorter Work Day*

Letter urging shorter working hours for nurses received by Dr. Padgett from Lulu V. Cline, R. N., president of the Indiana State Nurses' Association, brought to the attention of the committee. The Executive Committee felt that this is a matter which should be referred to the Council of the Association, and the secretary was instructed so to inform Miss Cline.

#### *Wayne County (Detroit) Medical Society Tuberculosis Case Finding Participation Plan*

An outline of this plan was given to Dr. Wheeler for study and report at the next meeting of the Executive Committee.

#### *Administration of Anesthetics by Non-Medical Men*

Dr. Davidson's letter in regard to this subject was brought to the attention of the committee. No action necessary at this time.

#### *Opinion of Attorney-General in Regard to Diagnostic Tests by Pathologists*

This opinion was published in the July number of THE JOURNAL.

#### *Placement of Foreign Physicians in Indiana*

Letter received from the secretary of the "Emergency Committee in Aid of Displaced Foreign Physicians" brought to the attention of the committee. This Emergency Committee is attempting to place "in communities where they may be needed" refugee German physicians who have come to this country. The Executive Committee instructed the secretary to answer this letter stating that 143 physicians took the State Board Examination in June and that the rate of graduation from medical school in Indiana is above the death rate, and that this state is very well supplied with physicians at the present time.

#### *Diphtheria Immunization Campaign*

Report of Dr. Jackson of the Indiana Division of Public Health, upon the campaign in Wabash and Wabash county, and correspondence in regard to Clark county reviewed by the committee.

#### *F. E. R. A. Work*

(1) Letter received from Wabash county that it had canceled its relief plan.

(2) Letter received from Dr. B. F. Gumbiner, secretary of the Calumet Township Medical Society, complaining of trouble in regard to the indigent sick work in that locality.

#### *Movement to Curb Itinerant Food Faddists*

Letter received from the National Food Bureau telling of the movement that has been undertaken to curb itinerant food faddists who are going around the country giving pseudo health lectures. Indiana was flooded with these faddists last winter and spring, among them being Richardson, Shanklin, Claunch, etc. The State Board of Medical Registration and Examination has acted successfully in several of these cases.

#### *Report on Twelfth District Meeting*

Report of Dr. J. H. Weinstein on the Twelfth District meeting which he attended on behalf of the Executive Committee of the state association due to the fact that the president and other officers of the association had previous engagements to attend other district meetings, brought to the attention of the committee. The committee expressed its appreciation to Dr. Weinstein for attending this meeting.

#### *Complaint against State Tuberculosis Sanatorium Practicing Medicine*

As a result of correspondence from the headquarters office, J. V. Pace, M. D., superintendent of the Indiana State Sanatorium at Rockville, against which institution the complaint was made in regard to the examination of indigents, has voluntarily adopted a plan of having each examinee certified indigent by his township trustee.

#### *Request for Association Mailing List by an Investment Company*

Letter from a bond and share corporation asking for the mailing list of the association brought to the attention of the Executive Committee. The Executive Committee felt that

it should not give commercial companies of this type a mailing list of the association.

#### *Report of Indiana Delegate to the Illinois State Medical Society*

The Executive Committee recommended that Dr. F. S. Crockett, representing the Indiana State Medical Association, make his formal report upon his visit to the Illinois State Medical Society 1934 annual meeting to the House of Delegates at the annual meeting of the Indiana State Medical Association in October.

#### *Comparative Schedule of Fees*

Suggestion of Dr. Hamilton Row that a schedule of medical fees as of 1890 compared with the present time, with a comparison of commodity prices of that time and at the present time be prepared, brought to the attention of the committee. The Executive Committee said it would be very pleased to receive such a schedule, and if it is thought wise, the schedule would be published.

#### *Creation of a Medical Commission of the Department of Indiana of the American Legion*

Information in regard to the suggested plan for the creation of a medical commission in Indiana similar to the commission functioning now in Illinois was discussed by the committee. Responses to a preliminary statement concerning such a plan, which was sent to members of the Veterans' Medical Committee of the Indiana Department of the Legion, the Executive Committee of the State Association, and the Committee on Veterans' Hospitalization of the State Association, indicate a favorable reaction to the suggestion. It is now up to C. C. Tucker, M. D., of Greencastle, chairman of the committee for the American Legion, C. C. Bassett, M. D., of Goodland, chairman of the committee of the State Association, and F. S. Crockett, M. D., of Lafayette, a member of the liaison committee of the American Medical Association, which has met with representatives of the American Legion at various times, to consider further the perfection of such a plan for Indiana.

#### *Prosecution of Naturopath Who Is Administering Drugs*

Correspondence in regard to a naturopath by the name of Hagan who is administering drugs in Howard county brought to the attention of the committee. This matter has been referred to the State Board of Medical Registration and Examination.

#### THE JOURNAL

(1) Mr. A. P. Miller, contact man of the Burford Printing Company which prints THE JOURNAL, appeared before the committee and asked that the committee approve an increase in the printing price of THE JOURNAL for the rest of the year above that agreed upon in the contract for 1934, due to the fact that the NRA and the advance in the price of paper had increased the cost of printing THE JOURNAL. According to Mr. Miller's statement the Burford Printing Company is losing on every issue of THE JOURNAL that it is printing. The committee disapproved of any increase over the contract price.

(2) Notice from Code Authority. The committee approved the payment of \$10.00 minimum basic charge to the National Code Authority for the periodical publishing and printing industry.

(3) Note criticising cigarette advertising. As this is the only complaint brought before the committee concerning cigarette advertising, it was thought that no action was necessary at this time.

(4) Request of Red Cross for free advertising space. The committee approved the request of the Red Cross and suggested that a half page be donated in THE JOURNAL to that organization.

(5) Prices of reprints. The difference between the reprint prices of another state journal and those charged by the printers of the Indiana STATE JOURNAL brought to the attention of the committee.

(6) Purchase of new bookcases. Prices are to be obtained on new bookcases and presented at the next meeting of the committee.

(7) Request for exchange with "Scientific Progress." The committee felt that this was not worth while.

#### *Malpractice*

Five cases reviewed by committee.

#### BUREAU OF PUBLICITY

May 11, 1934.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D.; L. G. Zerfas, M. D., historian of the Association, and T. A. Hendricks, executive secretary.

The subject matter of the release, "Vacations and Typhoid," approved.

Radio release, Saturday, May 5, "Vacations and Typhoid." Report on medical meeting: May 1, Kiwanis Club, Greensburg, Ind. "Child Psychology."

Request for speaker: May 29, Rotary Club, Mitchell, Ind. Speaker requested to talk upon "Heart."

The historian appeared before the Bureau and showed the pictures of past presidents that had been obtained. These are to be made in uniform size.

The suggestion was made that each county medical society appoint an historical committee to carry on research and prepare a pamphlet of medical history of each county. It was suggested that the historian write an article which will appear in THE JOURNAL, suggesting the appointment of such committees.

Additional names to be added to the speakers' list received by the Bureau.

The Better Business Bureau *Bulletin* of April contained a warning of the United States Food and Drug Administration against Marmola, a dangerous fat reducer that had been advertised in Indianapolis. The Bureau suggested that a note in regard to this be made in THE JOURNAL.

Pamphlets received from the United States Public Health Service. These are to be reviewed by a member of the Bureau.

Outline of institutes for nurses received. Suggestion has been made that arrangements for these meetings should be made through the local county medical societies and the chairmen of the child welfare committees in the various counties.

Request received from the Methodist Hospital White Cross Guild for 150 to 200 copies of the Bureau's newspaper releases each week for distribution to its members. Request granted by the Bureau.

June 1, 1934.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D.; J. H. Stygal, M. D., and Thomas A. Hendricks, executive secretary.

Release for publication in Saturday papers, June 9, "Your Doctor Attends a Convention," and release for publication in Saturday papers, June 16, "Vacations and Typhoid," read and approved.

#### Radio releases:

Saturday, May 12—"Indiana Mothers."

Saturday, May 19—"Strenuous Week-ends."

Saturday, May 26—"Prevent Hay Fever Now."

#### Reports on medical meetings:

May 8—High School, Portland, Ind. "Sex Education."

May 8—Kiwanis Club, Portland, Ind. "The Child—The Growing Edge of Civilization."



May 8—Rotary Club, Portland, Ind. "The Child—The Growing Edge of Civilization."

May 8—Camp Fire Girls, Portland, Ind. "Health."

Pamphlets received from the United States Public Health Service given to a member to review and to report on at the next meeting of the Bureau.

The following letter was received from a physician of Wooster, Ohio, in regard to the releases of the Bureau of Publicity:

"I appreciate very much your kindness in sending me copies of past releases and placing me on the mailing list of the Bureau of Publicity of the Indiana State Medical Association. I hope the Bureau has seen fit to keep me on the list. The articles are excellent and I assure you they will be used in an ethical way by the Wayne County, Ohio, Medical Society."

The Publicity Bureau authorized the secretary to place the secretary of the Wayne County, Ohio, Medical Society upon the mailing list to receive these releases.

Letter received from the secretary-treasurer of the American Association of Dental Schools enclosing recommendations gained from a survey of the dental curriculum. This letter was approved by the Bureau and was referred to the Committee on Medical Education of the State Association.

June 26, 1934.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D.; J. H. Stygall, M. D., and T. A. Hendricks, executive secretary.

Release for publication in Monday papers, July 2, "A Safe and Sane Summer," read and approved.

#### Radio releases:

Saturday, June 2—"Safe and Sane Swimming."

Saturday, June 9—"Your Doctor Attends a Convention."

Saturday, June 16—"Infant Care in Warm Weather."

Saturday, June 23—"Hot Tips on Keeping Cool."

#### Report on medical meeting:

May 29—Rotary Club, Mitchell, Ind. "Business Man's Heart."

A member of the Bureau made a report upon the pamphlets from the United States Public Health Service with notations as to material in these pamphlets which is suitable for release.

Article entitled "'Package Education' in Hygiene" in the June *Indiana Parent-Teacher* brought to the attention of the Bureau and approved by the Bureau.

Resolution in regard to prepayment for group and sickness care, reported adopted by the Board of Regents of the American College of Surgeons, brought to the attention of the Bureau. The secretary was instructed to write to the director-general of the American College of Surgeons and obtain an official copy of this resolution.

## BOOK REVIEWS

#### BOOKS RECEIVED

**THE MEDICOLEGAL NECROPSY:** Published under the auspices of the American Society of Clinical Pathologists; edited for the society by T. B. Magath, M. D., Mayo Clinic,

Rochester, Minnesota. Dealing with the determination of cause of death in supposedly criminal cases, and others which are subject to review in courts of law. 169 pages, 59 halftone and 4-line cut illustrations. Cloth. Price \$2.50. The Williams and Wilkins Company, Baltimore, 1934.

**INDUSTRIAL TOXICOLOGY:** By Alice Hamilton, M. D. One of Harper's Medical Monographs. 352 pages. Flexible binding. Price \$3.00. Harper and Brothers, publishers, New York, N. Y., 1934.

**DISEASES OF THE EYE:** For students and general practitioners. By Charles H. May, M. D., director and attending surgeon, eye service, Bellevue Hospital, New York, 1916 to 1926, etc. Fourteenth edition, revised. 376 original illustrations, including 25 plates, with 78 colored figures. 496 pages. Cloth. Price \$4.00. William Wood and Company, Baltimore, 1934.

**THAT HEART OF YOURS:** By S. Calvin Smith, M. D., Sc. D. 212 pages with six illustrations. Cloth. Price \$2.00. J. B. Lippincott Company, Philadelphia and London, 1934.

**INTERNATIONAL CLINICS:** Volume II. Forty-fourth series, 1934. Quarterly of illustrated clinical lectures and prepared original articles. Edited by Louis Hamman, M. D., visiting physician, Johns Hopkins Hospital, Baltimore. 317 pages. Cloth. J. B. Lippincott Company, Philadelphia and London, 1934.

**THE MERCK MANUAL OF THERAPEUTICS AND MATERIA MEDICA.** Sixth edition. 1379 pages. Flexible binding. Price \$2. Compiled and published by Merck and Co., Inc., Rahway, N. J., 1934.

**POSTURES AND PRACTICES DURING LABOR AMONG PRIMITIVE PEOPLES.** Adaptations to Modern Obstetrics, with chapters on Taboos and Superstitions and Parturition Gymnastics. By Julius Jarcho, M. D., New York. 175 pages, with 130 illustrations. Cloth. Price \$3.50. Paul B. Hoeber, Inc., New York, 1934.

**CLINICAL MANAGEMENT OF HORSESHOE KIDNEY.** By Robert Gutierrez, A. B., M. D., chief of clinic of the Department of Urology, James Buchanan Brady Foundation of the New York Hospital, etc. Foreword by Dr. Edmond Papin, Paris. 143 pages, with 52 illustrations. Cloth. Price \$3.00. Paul B. Hoeber, Inc., New York, 1934.

**THE DANGEROUS AGE IN MEN:** A treatise on the prostate gland. By Chester T. Stone, M. D. 105 pages. Cloth. Price \$1.75. The Macmillan Company, New York City, 1934.

**A PRIMER FOR DIABETIC PATIENTS:** A brief outline of the treatment of diabetes with diet and insulin, including directions and charts for the use of physicians in planning diet prescriptions. By Russell M. Wilder, M. D., professor and chief of the Department of Medicine of the Mayo Foundation, University of Minnesota; head of section on general metabolism, Division of Medicine, the Mayo Clinic. Fifth edition, reset. 172 pages. Cloth. Price \$1.75 net. W. B. Saunders Company, Philadelphia and London, 1934.

**THE SURGICAL CLINICS OF NORTH AMERICA:** (Issued serially, one number every other month.) Volume 14, No. 3

(Mayo Clinic number, June, 1934). Octavo of 221 pages with 70 illustrations. Per clinic year (February, 1934, to December, 1934), paper, \$12.00; cloth, \$16.00 net. W. B. Saunders Company, Philadelphia and London, 1934.

#### BOOK REVIEWS

**SURGICAL CLINICS OF NORTH AMERICA:** Philadelphia number, February, 1934. Issued serially, one number every other month. Volume 14, No. 1. 226 pages with 62 illustrations. Per clinic year (February, 1934, to December, 1934), paper, \$12.00; cloth, \$16.00. W. B. Saunders Company, Philadelphia and London, 1934.

The 1934 Philadelphia number of the Surgical Clinics of North America is filled with interesting reports by familiar names in Philadelphia as well as many new ones there. Their selection of material is up to the usual standard and makes this number a very valuable one.

**SURGICAL CLINICS OF NORTH AMERICA:** New York number. April, 1934. Volume 14, No. 2. 294 pages, illustrated. Per clinic year (February, 1934, to December, 1934), paper, \$12.00; cloth, \$16.00. W. B. Saunders Company, Philadelphia and London, 1934.

The New York number is very complete in useful information, but to this reviewer there appeared the best article that has been published in many a day. The first report is from the clinic of Dr. Edward L. Keyes. It is of no particular consequence that the case is one of any single type, but the very complete and thorough covering of points essential to a good case history, together with an absence of any redundancy or useless information, causes this one case history to be a lesson in description. One thinks of his seeing the patient right before him, so complete is the description of everything that is important to the case in a man's illness. The price of the book without anything other than Dr. Keyes' contribution would not be excessive. This reviewer hopes to see more case descriptions of this type.

**A PRIMER FOR DIABETIC PATIENTS:** A brief outline of the treatment of diabetes with diet and insulin, including directions and charts for the use of physicians in planning diet prescriptions. By Russell M. Wilder, M. D., professor and chief of the department of medicine of the Mayo Foundation, University of Minnesota, and head of the section on general metabolism, division of medicine, the Mayo Clinic. Fifth edition, reset. 172 pages. Cloth. Price \$1.75. W. B. Saunders Company, Philadelphia and London, 1934.

This little book explains for the diabetic patient, in understandable language, what diabetes is and what he may expect from treatment. It describes and explains the various tests, the weighing of foods, and the fuel value and composition of foods. There are chapters on insulin and its use, complications of diabetes, substitutions in diets, recipes, and tables of emergency diets, food values, average height-weight-age tables, and standard diets. A chapter for the physician on the planning of the diet is included, and while otherwise the book is distinctly for the diabetic patient, it contains a great deal of information which the general physician will find of value in caring for his diabetic patients. For the patient it will provide definite answers to the many queries which beset the new diabetic from the time of discovery of his condition.

**MODERN CLINICAL SYPHILOLOGY.** By John H. Stokes, M. D., Duhring Professor of Dermatology and Syphilology, University of Pennsylvania. Second edition, revised and

entirely reset. 1,400 pages, with 973 illustrations and text figures. W. B. Saunders Company, Philadelphia and London, 1934. Cloth, \$12.00 net.

To the doctor who thinks of syphilis as a disease which, when once found to exist in his patient, calls for a shot in the arm, "Modern Clinical Syphilology" by John H. Stokes will be just another big book. But to that physician (and we hope he is one of a respectably large group) whose conscience is not so easily cleared, the book will be one of the most useful in his library. As Dr. Stokes says, "Syphilis is a disease of low visibility and wide dispersion of manifestations. A large part of its course is run below the threshold of attention." Therefore, any treatise that tends to clear the picture by putting us on the alert in suspecting and recognizing syphilis is a useful one. Here is a text which gives us "alert suspiciousness of mind," the "absolute prerequisite in the successful detection of syphilis," and then tells us what to do next. The book is somewhat unique in that respect, for one feels after reading the book that it should be placed near for use as a reference. He acquires a sense of security in knowing that help in solving his problems in syphilis can be quickly found and reviewed. To those of us who are often undecided in the management of a given case of syphilis, this book should be a pleasure to have near.

The author starts us off by telling us how to examine the patient. These essentials, given with the many drawings by Drake, make the chapter as complete as one could ask for. After reading it, we next are put at ease concerning the fundamental principles of treatment. The arsenicals, the heavy metals, iodides and other chemicals are evaluated and a great amount of confusion can be cleared. How, when, and *when not* to use the drugs at our command is told in a clear, though simple fashion, allowing us to keep in mind the safeguards so often forgotten. The material in the book embraces the records of 75,000 cases of syphilis—certainly no dearth there. The material was collected from the syphilis clinics of Western Reserve University, the Johns Hopkins University, the Mayo Clinic, the University of Michigan, and the University of Pennsylvania, assisted by the Division of Venereal Diseases of the U. S. Public Health Service. The 1,339 pages are so crowded with information that this reviewer did not find a single page that did not contain some essential points. The physician who reads this book will be richer mentally and, in subduing syphilis, his part will be better played.

**CLINICAL MANAGEMENT OF HORSESHOE KIDNEY:** By Robert Gutierrez, A. B., M. D., F. A. C. S., chief of clinic of Department of Urology, James Buchanan Brady Foundation of the New York Hospital, assistant attending surgeon, New York Hospital, attending Urologist of the Hospital for Ruptured and Crippled, etc., and consulting genito-urinary surgeon, Chambersburg General Hospital. 144 pages with 52 illustrations. Cloth. Price \$3.00. Paul B. Hoeber, Inc., New York, 1934.

This monograph reveals the conception of a new medical entity, never previously described, and is based upon the clinical study of twenty-five cases of horseshoe kidney disease. The disease is produced by the position of the anomalous organ where it makes pressure upon important vascular and nervous trunks interfering with their functions as well as being disturbed in its own. The various types of horseshoe kidney are described, the pathology analyzed and diagnostic measures and treatment discussed. This is a well-written comprehensive study of particular interest to the urologist, yet it merits the perusal of all interested in the diagnosis of abdominal conditions.



# THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

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## ORIGINAL ARTICLES

### PUERPERAL INVERSION OF THE UTERUS\*†

WITH REPORT OF AN INSTANCE

HERBERT F. THURSTON, M. D.

FRANK TEAGUE, M. D.

INDIANAPOLIS

Puerperal inversion of the uterus is an unusual complication of labor. Because of its infrequency, sufficient interest attaches to this condition to justify recording all of the instances in which it is observed. Inversion may have a gynecological or an obstetrical origin. Those of gynecological origin result from the gradual traction of a polyp or of a pedunculated submucous myoma. They are always of the chronic type and are quite rare. Obstetrical or puerperal inversions are complications of the third stage of labor. Of 641 cases of inversion of the uterus compiled by Thorn<sup>1</sup> 81.2 per cent were obstetrical in origin, 13 per cent were due to uterine tumors, 2.2 per cent occurred post mortem, 2 per cent were idiopathic and 1.6 per cent occurred after abortions or premature labors. Of 500 cases collected by Crosse in 1846, 450, or 90 per cent, were puerperal.

Inversion may be partial or complete. When partial, there is an indentation of the fundus of a varying degree, but the body does not go through the external os. In the complete type the fundus passes through the external os. When complete, the outside of the corpus is the endometrium while the peritoneal portion becomes a cup leading up to the pelvic cavity.

#### INCIDENCE AND CAUSAL FACTORS

In a review of the literature published in 1929 Findley<sup>2</sup> found complete inversion of the uterus extremely rare with an average of 1 in 113,068 labors. He stated that only 76 cases of the com-

plete type were reported in the German literature in the 21 years ending in 1927. The report of Cohen<sup>3</sup> recorded 13 inversions in 1,603,740 deliveries, or 1 in 123,364. Jones<sup>4</sup> observed that inversion occurs once in 128,000 labors. Boswell<sup>5</sup> gave an incidence of 1 in 190,000. Ridlinger<sup>6</sup> of Leipzig found that from 1878 to 1919 there were 6 cases in 67,091 patients, or 1 in 12,000. In 26,000<sup>7</sup> deliveries from 1906 to 1933 in the Methodist Hospital of Brooklyn 4 cases of inversion occurred, or 1 in each 6,500. Masson<sup>8</sup> was of the opinion that the incidence varies from 1 in 200,000 to 1 in 60,000. In the clinics at the University of California Hospital, Maxwell<sup>9</sup> found that inversion occurred once in 6,500 deliveries. McCullough<sup>7</sup> has shown it to occur about equally in primiparous and multiparous women. Masson<sup>8</sup> stated that more occur in primiparous women.

It would seem that partial inversion is not unusual but is seldom recognized. Many partial inversions are probably spontaneously rectified. Almost all inversions are subtotal, the cervix forming a collar around that portion of the corpus which projects into the vagina. In very rare instances the inversion includes the cervix so that the entire organ is inside out. Puerperal inversions are all at first acute, and if they are not relieved by the end of a month are termed chronic. Of 224 instances of puerperal inversion studied by Kramp-ton<sup>10</sup> ninety-three, or 42 per cent, were chronic. In an analysis of 521 puerperal inversions Thorn<sup>1</sup> found ninety-two, or 18 per cent, of the chronic type. Kellogg<sup>11</sup> stressed the type between the acute and chronic stages. He felt that acute inversion passes to the subacute type when a contracting ring forms either at the site of the internal os or more probably at Bandl's ring. This change occurs after about twenty-four hours. When this ring forms, the fundus usually cannot be pushed back through, no matter how persistently or in what direction the force is applied.

In Indianapolis in the ten years, 1924 to 1933, inclusive, there were 66,906 births. There are records of six cases of puerperal inversion seen or treated in Indianapolis during these years. Five were in primiparous women and one in a multiparous woman; four of these became chronic before receiving treatment. Of the six, four occurred

\* From the Surgical Service, Indianapolis City Hospital and the Department of Gynecology, Indiana University School of Medicine.

† Presented in part before the Indianapolis Medical Society, February 6, 1934.

within Indianapolis, the other two having been brought from outside the city for treatment. For this registration area there is an incidence for the ten years of one to 16,728. (See Table I.)

In commenting on the occurrence of puerperal inversion, Reeve is quoted as saying, "It is an accident that may occur independently of anything done or omitted." In referring to spontaneous passive inversion, Matthew Duncan<sup>12</sup> said, "This occurs in cases of prolapsus or inertia of the whole uterus. The organ being large, its walls are relaxed and capable of being inverted by little force. Bearing down produces general collapse and compression of the organ, but it may produce an inversion if the depressing force is applied under favorable circumstances and the inversion will become complete if the bearing down is strong and continued." Evans<sup>6</sup> noted that relaxation of the uterus, especially after a long tedious labor or from a sudden diffuse hemorrhage is the primary predisposing cause of inversion. In addition, the causal factors commonly listed are traction on the cord and forceful expression of the placenta. Krampton<sup>10</sup> believed that it is difficult for an inversion of the uterus to be produced by traction

on the cord with the uterus firmly contracted. He also adds that the cord will break before a firmly contracted uterus will be forced to invert. There must be relaxation of the uterus to admit of an inversion. Given a relaxed uterus and a dilated cervix, increased intra-abdominal pressure or the weight of a heavy adherent placenta without manual traction may produce inversion.

#### SYMPTOMS AND DIAGNOSIS

Collapse associated with hemorrhage is the usual accompaniment of acute inversion but instances are recorded in which there was neither shock nor hemorrhage. There may be shock without hemorrhage or hemorrhage without shock. Most of the deaths have occurred within a short time after inversion. Chronic inversion may give few and even no symptoms. Reta and Carra<sup>13</sup> reported a chronic inversion of seven years' standing. Flechtenmacher<sup>11</sup> recorded one of eight years' duration and Schockaert<sup>15</sup> reported a chronic inversion of twenty years' duration. Peterson<sup>16</sup> operated on a woman twelve and one-half years after the labor from which inversion resulted. He had seen this patient two months after the accident and attempted manual reduction but failed. Operation was proposed but the patient refused.

The accompanying hemorrhage which is usually the chief symptom in the chronic type may be only occasional but gives rise to an increasing and marked secondary anemia. In addition to the anemia there may be a low-grade sepsis from absorption of the infected sloughing endometrium, gradually depleting the resistance of the patient. The malposition of the bladder may lead to urinary disorders and the presence of a tumor in the vagina may produce rectal symptoms. The effect of these is often backache, bearing-down pain, pressure and rectal tenesmus, and reflex nervous symptoms.

If the bleeding is not pronounced, chronic inversion of the uterus may not be diagnosed for months or even years after inversion has occurred. If, however, adequate postpartum supervision and examination are carried out routinely on every woman a diagnosis is

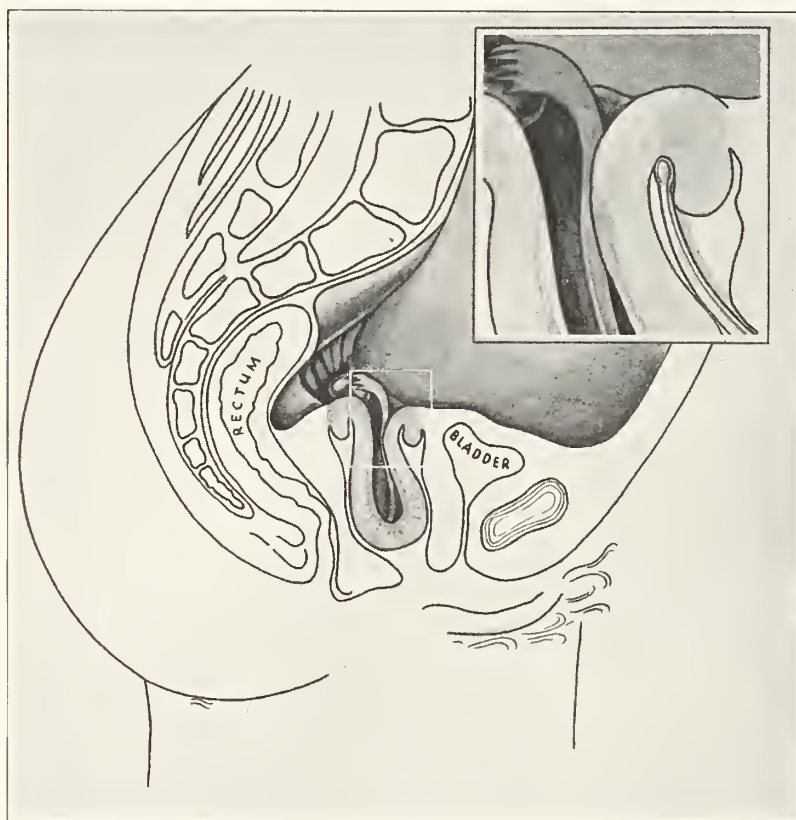


Fig. 1.

In inversion of the uterus the region back of the bladder occupied by the normal uterus is depressed into a cup-shaped cavity. The bladder is not drawn into this cavity hence one can proceed to dissect the bladder from the cervix without fear of damage. With a pedunculated tumor protruding from the cervix the uterine cavity is lengthened while in inversion the cavity is shortened. (See insert.)



made promptly and proper treatment may be instituted early. On speculum examination one finds a pear-shaped tumor in the vagina, partly or even completely filling it. The mass may even protrude from the vulva. This mass is gray in color until touched, when it bleeds easily and profusely.

In the gynecological type the diagnosis of inversion due to a fibroid is frequently difficult. The chief points are, first, in the puerperal type the uterine canal is shortened when a sound is introduced; secondly, on bimanual pelvic examinations, there is an indentation back of the bladder in the suprapubic region where the uterine body should be. This indentation may be felt if the abdominal wall of the patient is not too thick. A pedunculated submucous fibroid extending from the cervix may be puzzling. Jones<sup>4</sup> offered a means of differentiation by pointing out that a fibroid produces elongation of the uterine canal; inversion always shortens it. (See Figure 1 on page 370.)

TREATMENT

In acute inversion the first concern is to control hemorrhage and to relieve shock. During the first twenty-four hours manual reposition usually may be accomplished, but should not be attempted until the general condition of the patient warrants it. Spinal anesthesia seems to assist in relaxing the constricting cervix when used in the acute or sub-acute stage. De Gaudina<sup>17</sup> prepared to operate on a chronic case of puerperal inversion by the anterior colpohysterotomy method and used spinal anesthesia. By this agent the cervix relaxed and the uterus was easily reduced without incision. Jones<sup>4</sup> tabulated all of the accepted methods of treatment and Day<sup>18</sup> summarized the vaginal operations for complete inversion. In the subacute stage with a large, boggy, bleeding fundus the combined abdominal and vaginal operation described by Huntington<sup>19</sup> may be the procedure of choice. The abdominal operations are of value in those recent cases which cannot be reduced by taxis.

In chronic inversion the

vaginal route is to be preferred. If the uterus can be saved, Peterson<sup>16</sup> advised anterior colpohysterotomy (the so-called Spinelli operation) as the ideal procedure. Vaginal hysterectomy is reserved to remove a sloughing gangrenous uterus. The danger to the bladder and uterus by the anterior incision is negligible, no greater than when operating for an extensive cystocele. A distinct advantage of the anterior uterine incision is that the line of incision after repair is well covered by the bladder, minimizing the occurrence of subsequent intra-abdominal adhesions.

The dissection is started and made as in exposing the lower portion of the pubocervical fascia in a cystocele repair. The bladder is dissected from the cervix and the cervix is incised, dividing completely the constricting ring. The incision is carried toward the fundus through the anterior uterine wall a distance sufficient for reinversion of the uterus. The forefingers are placed at the

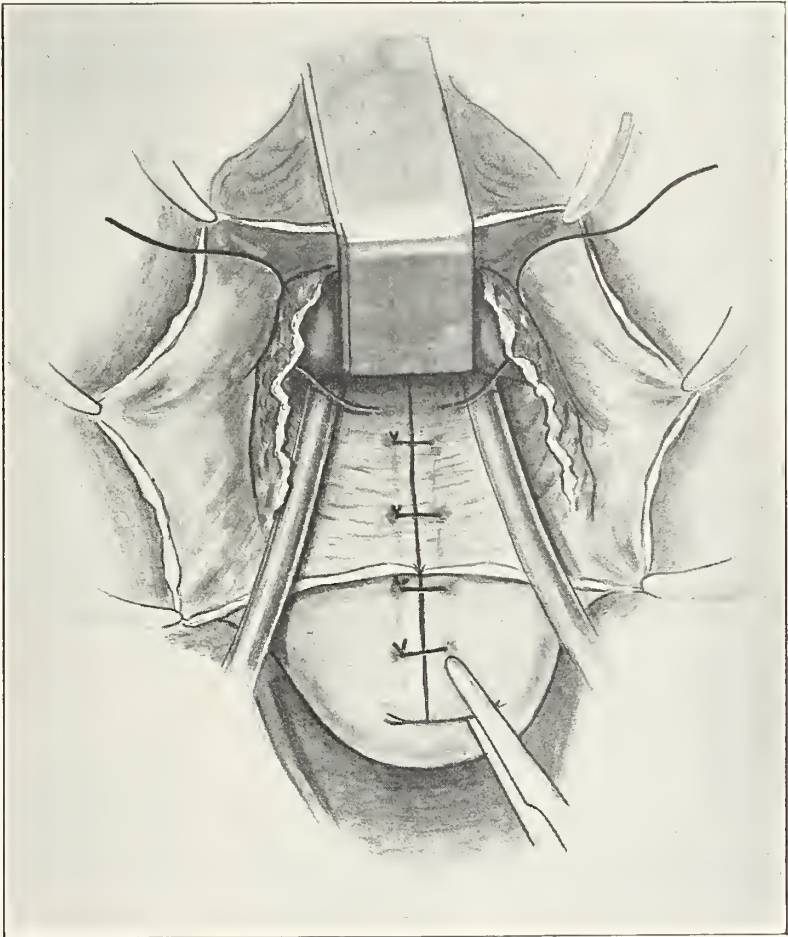


Fig. 2.

Two narrow strips of rubber dam were inserted anterior to the uterus into the abdominal cavity for drainage. Applicable in this instance but perhaps not in all, is the isolation of the pubo-cervical fascia and the advancement of the bladder on the cervix as in a cystocele repair. The drains were removed at the end of forty-eight hours.

cervix for counter-pressure and the fundus is forced upward by the thumbs in the manner used in turning a tennis ball inside out through a cut in its side. The incision in the uterine wall is then closed by two rows of interrupted chromic catgut sutures. Owing to the shrinkage which the peritoneum has undergone in its inverted position, it may not be approximated easily. The tissue of the uterine wall may roll out in the manner of an ectropion. This excessive tissue should be trimmed away in the form of a longitudinal wedge and the peritoneal edges can be coapted without difficulty. It is probably safer to introduce drainage.

TABLE I. INCIDENCE OF PUERPERAL INVERSION

## A. RATIO OF INVERSIONS TO BIRTHS

Observers	Period	Area or Clinic	Ratio
Findley	1929	From Literature to Date	1:113,068
Findley	1906-1927	Complete German Literature	76 Cases
Ridlinger	1878-1919	Leipsic	1:12,000
Davis	1906-1933	Methodist Hospital, Brooklyn	1:6,500
Masson	1926	Mayo Clinic	1:200,000 to 1:60,000
*Thurston Teague	1924-1933	Indianapolis	1:16,728

## B. PRIMIPAROUS COMPARED TO MULTIPAROUS WOMEN

Masson	1926	More in Primiparous Women
McCullough		Equally in Primiparac and Multiparac
*Indianapolis	1924-1933	5 Primiparac—1 Multipara

## C. RATIO OF CHRONIC TO ACUTE CASES

Krampton	224 Cases	93 Chronic	42 per cent chronic
Thorn	521 Cases	92 Chronic	18 per cent chronic
*Indianapolis	6 Cases	4 Chronic	66.6 per cent chronic

\*In the registration area of Indianapolis there were 66,906 births in the ten years 1924 to 1933. Four instances of inversion occurred within this area during this time. Two other cases were brought to local hospitals from outside the city for treatment.

## REPORT OF A CASE

M. H., a white female, 22 years old and married, entered the Indianapolis City Hospital, November 15, 1933, complaining of bleeding from the vagina when on her feet, syncope, weakness and dizziness. The vaginal bleeding began five months before admission following the birth of her first child.

On admission there was a pulse rate of 100, and her oral temperature was 98.6 degrees F. The urine-analysis revealed a slight trace of albumen, no evidence of reducing bodies and a specific gravity of 1020. There were 1,690,000 red cells and 5,500 white cells per cu. mm. of blood and the hemoglobin percentage was 15 (2.4 g.—Dare).

On physical examination the systolic blood pressure was 120, the diastolic 75 mm. Hg. The patient was very pale and extremely listless. The findings were otherwise essentially negative except

on vaginal examination. Through the speculum there was a mass the shape and size of a small pear with a pale gray surface that bled easily when touched.

Manual reduction of the inverted uterus was attempted November 16, 1933. This was unsuccessful. Three transfusions, 500 c.c. each of whole blood were given on November 16, 17 and 20, respectively.

On November 23, under ether anesthesia, the fundus was reinverted by the anterior colpohysterotomy technic. Two strips of rubber tissue drain were inserted and removed at the end of forty-eight hours. (See Figure 2.) The patient made an uneventful recovery and was discharged from the hospital December 10, 1933.

## DISCUSSION

In 192 instances of puerperal inversion compiled by Crosse<sup>20</sup> in 1846 there were eighty deaths, a mortality of 62 per cent. Of these seventy-two died within an hour postpartum. Vogel<sup>2</sup> collected 100 cases, of which 23, or 23 per cent, died. In nineteen of these death ensued within a few hours after labor. It would appear that hemorrhage and shock are the immediate causes of death in the greatest number of cases. Nearly 75 per cent of deaths in a series of 560 cases examined by Ewer<sup>21</sup> were caused by shock and hemorrhage. By earlier diagnosis, careful asepsis, and by the use of blood transfusion to combat the shock and hemorrhage before replacement, the mortality rate has been materially lowered. Findley<sup>2</sup> remarked in 1929 that the mortality rate ranged from 14 to 26 per cent. Jones<sup>4</sup> cited a mortality of 6 per cent for chronic inversion.

From his experience with Caesarean section Peterson<sup>11</sup> believed that after inversion operations rupture of the uterus will not follow in subsequent labor. Miller<sup>22</sup> has studied the records of fifty-six patients who had a puerperal inversion followed by another pregnancy. In the management of pregnancies following an inversion, from the information presented it would appear that conservative treatment with the hope of a normal confinement is the treatment of choice. The necessity for advising Caesarean section for a subsequent pregnancy in this type of case would appear slight. In fact, the evidence is in favor of a normal confinement in the operative group. Those cases with the history of manual reduction of an inversion, Miller found, should be carefully watched for complications, such as recurrence, adherent placenta and hemorrhage.

## CONCLUSIONS

1. Puerperal inversion of the uterus is an unusual complication of labor. In the Indianapolis Registration Area for the ten years ending December 31, 1933, the incidence is 1:16,728.

2. The chief cause is relaxation of the uterus after delivery. Bearing down, pulling on the cord



or a too vigorous Credé maneuver may assist in inversion.

3. The chief symptom of chronic inversion is secondary anemia. There also may be low-grade sepsis, urinary disturbances and pain.

4. Puerperal inversion, if present, should be detected by routine postpartum speculum vaginal examination before it becomes chronic.

5. The mortality rate is high. Most deaths occur in the first twenty-four hours after delivery. It would appear that shock and hemorrhage are the immediate causes of death.

6. For chronic inversion where the uterus can be saved, the ideal treatment is anterior colpohysterotomy. Vaginal hysterectomy is reserved to remove a sloughing gangrenous uterus.

7. An instance is presented of chronic inversion in a primipara with an extreme secondary anemia. An uneventful recovery followed reduction by anterior colpohysterotomy (Spinelli operation).

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## CONGENITAL ABSENCE OF BILE DUCTS

WITH REPORT OF CASE

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Although about 130 cases of congenital absence of bile ducts have been reported in the literature, the condition is rare enough to justify the report of an additional case.

#### REPORT OF CASE

History: P. D., a white male, aged 3 weeks, was seen on July 10, 1933. The chief complaint was a coated tongue. The child had apparently been well until the previous day when he vomited one feeding and refused to take his other feedings as well as formerly. Up until this time jaundice had not been noted especially, but from birth the stools were known to have been very light in color.

The baby was the first child. Delivery had occurred at full term. Both parents were living and well. During the last two weeks of pregnancy, on two occasions, the mother's blood pressure rose to 200/120. However, with bed rest only, this dropped to normal within 24 hours, and there were no other signs of toxemia.

Physical findings: Examination revealed the following essential points: The patient was a well developed, fairly well nourished, white, male infant. Over the neck, arms, and chest was a fine papular eruption. The skin and sclerae were moderately jaundiced. The entire dorsum of the tongue was covered by a yellowish white, dry coating. No other part of the mouth or fauces was involved. The liver edge was palpable two finger-breadths below the costal margin. The spleen extended one finger-breadth below the costal margin.

Laboratory data: Stool—clay-colored; contained a large amount of fat; repeatedly negative for bile pigment. Urine—color, dark; repeatedly positive for bile pigment. Blood—Kahn reaction, negative; icteric index varied between 37 and 60; van den Bergh reaction, direct immediate; bilirubin, 3 mg./100 c.c.; fragility test gave normal results; hemoglobin, 70%; R. B. C. 3,400,000; W. B. C. 12,000.

Course and operation: There was an afebrile course. The jaundice varied from week to week and at one time almost completely disappeared. The child was fed on a skim milk and Karo mixture and gained weight normally during the first three months. The liver and spleen grew progressively

larger. At the age of three months the patient was operated by Dr. Frederick Collier of Ann Arbor, Michigan, whose report follows:

"Under local anesthesia supplemented with a few drops of ether an incision six centimeters long was made through the middle of the right rectus muscle in its upper portion. Exploration revealed the stomach and duodenum to be normal. The liver was enlarged, extending about two centimeters below the costal margin. It was nodular, firm, and hard, having the feel of a cirrhotic liver. It was blackish green in color. Its under surface was explored by direct vision, and in the gall bladder fissure was a small cystic-appearing mass, which seemed to be a rudimentary gall bladder. No ducts were visible. The foramen of Winslow was open. The spleen was hard and enlarged, the lower border being level with the costal margin and descending slightly below it on respiration. The pancreas was not grossly abnormal to palpation. No extensive exploration of the lower abdomen was carried out. The situation seemed to be atresia of the gall bladder and bile ducts with a resultant cirrhosis and splenomegaly."

For the month following operation the child's condition remained about as it was previously except for two small hemorrhages from the rectum. During the last month there developed a progressively increasing ascites. The jaundice became more marked. The temperature was constantly elevated and the child at times was comatose for periods of 48 hours. Death occurred at the age of 5 months.

**Autopsy:** The body was that of a male infant about 5 months of age. The abdomen was greatly distended. There was a very marked jaundice. A well healed laparotomy wound was present in the upper right quadrant. The abdomen contained about 1,000 c.c. of a clear yellow fluid. On exposing the under surface of the liver a large number of lymph glands, deeply stained, from bean to hickory nut size, were seen extending from the gall bladder to the duodenum. The liver was removed in mass with the duodenum, stomach, pancreas, and spleen.

The liver was enlarged and of an olive green color. Weight, 250 grams. It was very hard, and its surface was definitely granular.

The gall bladder was represented by a small sac, about 4 x 15 m.m., containing no bile. The cystic duct could not be demonstrated, nor could a small probe be passed out of the gall bladder. Lying just to the left of the gall bladder was a cystic mass about one centimeter in diameter. On opening, this was found to be filled with bile, but no outlet to this cyst could be demonstrated. Beneath this, and extending into the right and left lobes of the liver, were two dilated, bile-filled ducts which met and were attached to the above mentioned cyst, but no communication could be found between them. Careful dissection showed no evidence of a common bile duct.

The duodenum was normal in size and contour. The ampulla of Vater was present and the pancreatic duct patent.

Sections were reviewed by Dr. C. V. Weller of the University of Michigan, whose report follows: "Microscopically the liver shows icterus and chronic productive interlobular hepatitis of a type which has been described from Dr. Mallory's laboratory as occurring in congenital absence or obstruction of the bile ducts. As compared to the usual forms of interlobular hepatitis there is a striking lack of bile ducts elements. A section of one of the lymph nodes shows it to have a certain architectural resemblance to spleen, such as the nodes that have been described as splenolymph nodes. It also shows chronic icterus and contains many cells with phagocytized bile pigment."

#### EMBRYOLOGY

In the embryo of 2.5 m.m. a diverticulum<sup>1</sup> extends from the wall of the foregut near its junction with the yolk sac. Very early this becomes divided into two parts, (1) the somewhat rounded diverticulum proper, and (2) a mass of anastomosing cords or trabeculae, which extend upward to the septum transversum, and are connected to the diverticulum at several points. In later stages, the mass of anastomosing trabeculae is drained by a system of ducts which empty into a single hepatic duct, which represents one of the original connections between the diverticulum and the trabeculae. The hepatic duct is joined by the cystic duct coming from the gall-bladder which is a special subdivision of the distal end of the original diverticulum. The common duct thus formed is an elongated portion of the proximal end of the original hepatic diverticulum.

Ylppo<sup>2</sup> states that the extra-hepatic ducts are first patent and then lose their lumens through epithelial proliferation, to become solid cords, only later becoming patent again.

#### ETIOLOGY

The two principal theories as to the etiology of this condition are (1) a congenital malformation with a secondary cirrhosis dependent upon the interference with the exit of bile. The malformation may be either a partial obstruction<sup>3</sup> interfering with the outflow of bile which causes catarrh, and ultimately obliteration due to the spread of inflammation to the walls of the ducts; or a failure of the ducts to canalise; (2) a primary toxic factor<sup>4</sup> producing cirrhosis with a subsequent obliteration of the bile ducts. This cirrhosis is stated to be either a congenital or fetal cirrhosis, or a toxic cirrhosis following a maternal toxemia.

#### PATHOLOGY

Outside of the bile ducts the pathological changes are quite uniform. The liver is enlarged in size and shows a marked cirrhosis.



Any variety of pathology may be found in the bile ducts, but in the majority of cases the atresia or absence is in the larger radicals only. These may be entirely absent together with the gall-bladder, or represented by a fibrous cord. Benecke<sup>5</sup> found that the atresia occurred in most of his cases at the lower level of the common duct. Ladd<sup>6</sup>, in reviewing twenty cases, reports that there were five in which the common, hepatic, and cystic ducts were represented by fibrous cords; three in which the obliteration took place in the common duct only; three in which there was partial obstruction of the common duct with dilation of all the ducts and gall bladder; and four in which the site of obstruction was not mentioned in the protocol.

In a series of 89 cases Milne<sup>7</sup> found that the obliteration occurred in the common duct in seventy instances. In thirty-nine cases, the common hepatic duct was also obliterated. In the series collected by Howard and Wolback<sup>8</sup> the cystic and hepatic ducts were the most common sites of atresia.

Parsons and Hickmans<sup>9</sup> reported a case in which only the intra-hepatic ducts were occluded.

#### SYMPTOMOLOGY

The condition is more common in males than in females. Babies with this malformation usually appear normal at birth, but are sometimes jaundiced. If jaundice is not present at birth, it develops in two or three days and increases progressively. After the jaundice has developed, the urine contains bile. The stools may at first appear like meconium, if the ducts were not closed until late in fetal life. Usually they are gray or white and remain so. The liver is almost invariably increased in size. The spleen is enlarged. The nutrition is surprisingly well maintained. Hemorrhages frequently occur. The blood serum shows an increase in bilirubin content and gives a direct immediate van den Bergh reaction.

#### DIFFERENTIAL DIAGNOSIS

Icterus occurring in the newborn necessitates a differentiation between icterus neonatorum, congenital hemolytic icterus, icterus associated with sepsis, familial icterus of the newborn, syphilitic hepatitis, acute catarrhal jaundice, and congenital atresia of the bile ducts.

Icterus neonatorum is essentially evanescent and has been variously reported in from 30 to 80 per cent of all newborns. Definite recession usually occurs, even in severe cases, by the end of the second week. Bile pigment is present in the stools.

Congenital hemolytic icterus is characterized by the extreme fragility of the red blood corpuscles. Bile pigment is always present in the stool, and the urine contains a large amount of urobilin.

The jaundice of sepsis is usually differentiated by the character of the temperature, the toxemia, the presence often of bacteremia, hemorrhages from the cord, bleeding into the skin and mucous mem-

branes, and the usual rapidity of the course in a septic infection.

Icterus gravis neonatorum is a rare condition, usually fatal in the first few weeks of life. The cases which survive longer may be differentiated from atresia of the bile duct by the presence of bile pigment in the stools. There is a tendency toward repetition in a family. Also, it is often associated with cerebral manifestations, irritability, hyperesthesia, and spasticity of the extremities.

Syphilitic hepatitis often presents difficulties in diagnosis. In most cases the presence of other stigmata of syphilis, the family history, and the serology are of the greatest aid. The stools usually contain bile pigment while the urine does not.

Acute catarrhal jaundice is very rare in early infancy, although a few cases are reported in the literature from time to time. The short duration of catarrhal jaundice should distinguish it from atresia of the bile ducts. There is also usually a history of an acute gastro-intestinal upset and an elevation of temperature. Hempleman<sup>10</sup> reported three cases in infants. The duration of the disease in his cases was from six days to two weeks.

#### PROGNOSIS

Complete atresia of all ducts is invariably fatal, death occurring usually within three months. Deaver<sup>11</sup> reports a case, with absence of all ducts and gall bladder, that lived one year and twelve days. Operative procedure offers hope in patients in whom either the common duct or the gall bladder connects with the liver. Holmes,<sup>12</sup> reviewing the literature up to 1916, stated that 16 per cent were amenable to surgical treatment. Ladd<sup>6</sup> reports that of eleven patients operated eight were amenable to surgery, and of those eight, six recovered.

#### COMMENT

The etiology of this condition is a much debated question. Probably all cases cannot be classified under either of the two theories stated. It would seem logical to conclude that, if there was a primary toxic factor producing a cirrhosis with a subsequent obliteration of the bile ducts, the obliteration would be most marked in the finer or intra-hepatic ducts, such as in the case reported by Parsons and Hickmans.<sup>9</sup> In the majority of cases, however, the atresia occurs in the ducts most distal to the liver. Cases have been reported in one of twins with the other twin healthy (Watkins and Wright<sup>13</sup>). This appears to be incompatible with the theory of maternal toxemia, for it is improbable that one of twins should have been injured by a toxin that presumably circulated through both.

If it is a fact, as Ylppo<sup>2</sup> states, that the extra-hepatic ducts lose their lumens through epithelial proliferation and later become patent again, we can explain the great majority of cases of atresia of bile ducts on the basis of a congenital defect of development better than by any other theory.

The fact that the jaundice is not present at birth does not necessarily imply that the biliary tract in such cases is at least partially patent at birth. Ylppo<sup>2</sup> has shown that bile pigment is not present in the biliary secretions until the fifth or sixth month of fetal life and from then until birth only in small amounts. After birth bile is produced in larger quantity, and the delayed onset of jaundice coincides with the much augmented production of bile in the first few days of life.

The case here reported best fits in with the theory of a congenital anomaly of the bile ducts. The clinical progress of the case favors the view that biliary obstruction preceded the cirrhosis. The liver was enlarged probably from birth, but grew progressively larger and harder. At first there was no evidence of portal obstruction, and it was only after some months that the portal circulation gradually became obstructed. The clinical picture was thus one of an increasing cirrhosis which set in long after the first signs of jaundice.

#### CONCLUSIONS

1. In an icterus that persists in an infant with the presence of acholic stools, with a choluria, and with an immediate direct van den Bergh reaction, the diagnosis of biliary duct atresia is quite probable.

2. Since some cases are amenable to surgical treatment, laparotomy is indicated.

3. In the case reported, the etiological factor can best be explained on the basis of a congenital defect of development of the bile ducts.

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## DIET AND FLUIDS IN PREGNANCY

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The fetus, developing during a pregnancy of a normal healthy woman, in most instances will take care of itself regardless of our consideration. The fertilized ovum is not a maternal cell subject to the general metabolism of the maternal organism. It is a new dynamic organism developing by special arrangement in the mother as the host. Its wel-

fare is naturally subject to the welfare of the host but only indirectly. The biological needs of the fetus are essentially the same as those of the mother.

Two of the most important factors in the welfare of the pregnant woman are her diet and the control of her water balance mechanism. The role of these factors in bringing the woman to term labor in the best possible physical condition must be of great importance in relation to maternal mortality and morbidity.

#### THE NORMAL DIET

What may we consider a normal diet and what is accomplished by it? Such a diet should include<sup>1</sup> sufficient bulky residue foods to guard against constipation, sufficient alkaline foods to balance the acid foods, sufficient sugars and starches to burn the fats, enough quantity of foods to furnish the needed calories, sufficient protein, minerals and vitamins, and an ample amount of water.

These requirements will be met by the following daily diet: A quart of milk is ideal, but a pint is necessary, or one-quarter pound of cheese can be substituted for the milk; one or two eggs; one serving of meat, fish or fowl; two servings of leafy vegetables; two servings of root vegetables; one serving of raw fruit; one of cooked fruit and one tablespoonful of butter. Iron and vitamin D will perhaps be at the minimum requirement. To this basal diet may be added cereals, breads, desserts and sweetenings to make up any necessary caloric needs.

Sufficient water should be taken to keep the urine a light straw color and about three to four pints a day. It acts as a food solvent and the chemical processes in the body are carried on in water solution. Much of the waste products of digestion are excreted in water solution.

If an individual does not vary more than ten pounds from the standard weight table for sex, age and height, we may assume that the diet has been supplying her caloric needs. This caloric need will also depend upon her state of activity. One thousand to 1,200 calories are essential for bed rest. Fifteen hundred calories is an invalid's requirement. The basal diet alone equals about this caloric content. Two thousand to 2,500 calories is sufficient for the usual woman's duties of housework and is sufficient and correct for the average pregnant woman whose weight is within normal limits. Of this the fetus in the last months of pregnancy uses about 450 calories.<sup>2</sup>

Constipation is controlled by the bulky residues of the foods, chiefly the vegetables, and by the chemical stimulus of fruits and certain vegetables. The average person requires about two pounds of fruits and vegetables a day, the lower the carbohydrate content of the vegetables the more efficient they are for constipation control. I have



found the addition of brewer's yeast a valuable help in combating constipation associated with pregnancy.

When foods are burned or metabolized in the body the residue or ash is either acid or alkaline. The body tries to maintain itself on the alkaline side. The urine should be kept neutral or slightly acid. If too much acid-ash food or too little alkaline-ash food is eaten a type of acidosis may develop causing lassitude, loss of appetite, headache, restlessness, excessively acid external secretions and an "acid-disposition."

Another type of acidosis, resulting in the same symptoms, is due to the ingestion of insufficient sugars and starches to burn the fats metabolized. Starvation or the semi-starvation of reducing diets produces this type of acidosis.

Many minerals are essential to the proper body functioning. Iron is essential to hemoglobin formation. The carbonates of sodium, potassium and magnesium are important in the elimination of carbonic acid from the body. They are found chiefly in the fruits and vegetables. The phosphates of sodium and potassium are used by the kidneys to excrete acid. The alkaline phosphates are likewise found in fruits and vegetables. The chief acid-ash of the meats are the acid phosphates. Calcium, as the phosphate and carbonate, makes up about 90 per cent of the minerals of the bone. It is found chiefly in milk and vegetables. Sodium chloride maintains the proper density of the body fluids and cells. Iodine, copper, manganese, sulphur and other trace elements are necessary in the daily diet. Iodine, if the diet is deficient, is easily supplied by iodized table salt. Mendel<sup>7</sup> defines "the law of the minimum" as the principle that growth and maintenance will be normal only when all essentials of the intake are adequately available. Any diet, for whatever disorder, should keep this in mind.

#### THE VITAMINS

The role of vitamins<sup>1,4,5,6</sup> in the diet is still not on a well understood basis. Their necessity is realized but their specific functions, except in a few conditions, are not very well worked out. The person eating the normal diet containing a quart of milk, two pounds of fruits and vegetables and enough alkaline and mineral foods need not worry about vitamins. To insure vitamin D, sunlight should be included. Variety in the diet is essential to the presence of sufficient vitamins. It is surprising, however, how frequently one finds women, even in good economic circumstances, who include in their daily diet little or no milk and eggs and even insufficient fresh fruits and vegetables. For the woman living on a very restricted diet due to her inability to buy a variety of food, the lack of necessary vitamin factors may be very real.

Vitamins are substances not ordinarily manufactured in the body and they vary considerably in

the ability of the body to store them. The importance of the mother's intake of vitamins to the growing fetus is obvious. Very little has been learned about the interrelationship and interdependence of vitamins to each other, but the necessity of the presence of all of the vitamins in the diet to insure normal growth and maintenance is likely.

The abundance of vitamin A stored in the body normally would make one believe its importance is very great. Laboratory animals have shown that it is important for reproduction and lactation. Most of the experimental evidence demonstrates that this vitamin is important for the integrity of the epithelial tissues. Laboratory animals on diets deficient in vitamin A develop severe infections which are cured by adding this vitamin. There is little likelihood of vitamin A deficiency on even the poor or average American diet, and so far the addition of excesses of this vitamin to average diets has not given any definite evidence that it prevents acute infections or cures them. The experiments on human beings so far have not been very important one way or the other, it seems to me, for the control diets are not vitamin A deficient to begin with. Its value as a therapeutic influence on puerperal sepsis has yet to be proved.

Vitamin B (complex) is made up of two factors, B<sub>1</sub> or F and B<sub>2</sub> or G. Besides their specific actions in certain diseases they are important to fertility and growth of laboratory animals. Vitamin B (complex) increases the appetite and is concerned with intestinal tonicity. It has been determined that three times as much vitamin B (complex) is required for lactation as for ordinary growth in live-stock. The great requirements for milk secretion were shown to be due to the nursing mother dissipating over 60 per cent of the vitamin in the chemical and physical changes involved in its transfer to the milk.<sup>7</sup>

Vitamin C has recently been identified as hexuronic or ascorbic acid.<sup>8</sup> It has been shown that the rat and infants up to the age of five months can actually synthesize this vitamin. Besides the prevention of scurvy this vitamin is essential in keeping intact the integrity of the vascular lining and for tooth formation and bone metabolism.

Vitamin D is essential for the absorption of calcium and phosphorus, which are important in all tissues of the body, especially the bones and teeth.

Vitamin E is essential to the early stages of normal reproduction in laboratory animals. It has been found necessary to the male germ cell but not to the female germ cell. But this necessity has not been demonstrated in the human animal. Its relation to habitual abortion in women would seem worthy of very careful further investigation.<sup>9</sup> It would seem that the gate has hardly been opened into the broad field of possible experimental

tion with vitamins in relation to the pregnant and lactating human mother.

#### THE MATERNAL WEIGHT GAIN

The relation of the weight gain of the mother to the birth weight and size of the child has caused much controversy since Prochownik's original article published in 1889. In the light of modern clinical investigation it is interesting that in support of his theory Prochownik reported the results of only twenty-six labors observed by him in seventeen patients over a period of twelve years.<sup>20</sup> There has been no controlled series of cases using this diet, reported since that time, that I know of. The diet<sup>21</sup> consists chiefly of protein and fat which, assuming that it did influence the weight of the child, would no doubt do so by being a deficiency diet and causing premature labors. Really, all that Prochownik actually claimed was that it would produce a baby with one or two pounds less of fat than ordinary. He thought this would make for easier molding of the bony parts during birth. Such an influence has never been demonstrated. It would, however, take a large series of cases to prove this, for I have frequently seen a mother having several babies and taking an uncontrolled, similar diet each time produce babies varying in weight by four or five pounds.

Toombs<sup>22</sup> studied a series of 250 cases in relation to the maternal weight gain and infants' birth weight. His results revealed that no definite relation could be found between the two factors.

One must not use size and weight of babies interchangeably, for a large-headed, heavy-boned, lean infant may weigh no more than a small-headed and small-framed, very fat baby, but it would be the large-headed baby that would cause the difficulty in labor.

The fetus apparently has its own growth laws independent of the maternal organism, and it may grow normally in size and weight in spite of an excessive maternal diet. The placenta is fetal tissue and, we may assume, has a selective action for the fetus. Since there is a remarkably constant chemical makeup of the maternal blood, the placenta needs only to pick out its specific needs regardless of the intake of the mother, so long as there is no marked deficiency in the maternal diet of those elements she cannot manufacture herself.

I believe the size and structure of the child are determined chiefly by the hereditary characteristics of the parents and their ancestors and that babies of the same mother vary at birth according to Mendelian law. Endocrine glandular dysfunctions of the fetus itself must be held accountable for some of the abnormalities of its size and weight. In aboriginal, pure-bred races eutocia is the rule. In our complicated mixture of civilized races why should we not expect a mother to nurture within her babies not ideally developed for her pelvis?

In any investigation of the relation of maternal weight to newborn infant weight the question of

prematurity and postmaturity must be taken into consideration. There is no way of actually determining this, and deficiencies in diets very likely produce premature babies, while a sedentary life tends to postmaturity.

The normal weight gain for pregnancy is about eighteen to twenty pounds. If the woman is underweight she will no doubt gain more than average. If she is overweight she should not try to reduce but should not gain. The carbohydrates should supply about 50 to 60 per cent of the caloric energy, the proteins 10 to 15, and fats 25 to 30. When the woman gains excessively during pregnancy, especially if she is overweight to begin with, there cannot help but be a strain on all the maternal organs concerned with metabolism. The work of the heart will become excessive. With an excessive gain of 30 to 50 pounds, the extra cardiac work must be of much importance to the woman's well-being. The load on the detoxicating organ, the liver, and on the eliminating organs, the kidneys and bowel, will cut down their efficiency markedly, and if a threat of toxemia comes they will be hard pressed to meet it. The second reason for keeping the weight to normal is that overweight or obese mothers nurse their babies poorly. Also, a flabby abdominal wall makes less efficient the action of the muscles. And then, most women desire to look well after pregnancy and an excessive gain in weight, which she does not lose after delivery, does not add anything to her morale. The patient should be weighed often enough to know her rate of gain. Rapid increases in weight are most frequently due to edema.

Coffee may be allowed for breakfast. Light wines and beer in moderation may be permitted, but there is every reason to believe that spirituous liquors are undesirable and should be avoided.

#### NAUSEA AND VOMITING OF PREGNANCY

During the first three months of pregnancy the most common disorder is nausea and vomiting. This, I believe, is mainly a metabolic difficulty, regardless of whether the underlying cause is toxic, neurotic or reflex. From the practical standpoint, if the patient can ingest and keep enough food to prevent a loss of weight, she usually avoids being nauseated. The rapidly growing fetus during the first three months no doubt makes unusual demands upon the maternal metabolism. It may be that after the formation of the placenta by the third or fourth month, these demands are adjusted in some way.

In any case if the patient's nervous mechanism is calmed by bromides or a barbitol like pentobarbital sodium, and if she will take six or seven small meals a day, including one before breakfast and one at bedtime, she can usually control her nausea. Her diet should avoid fats, which get out of the stomach the slowest of foods, and be chiefly carbohydrates such as cereals, crackers, toast, cookies, potato, spaghetti, macaroni, jellies, sher-



bet, fruits, most desserts and also lean chicken, fish, beef and veal. Fluids are needed in abundance between meals. In the cases seen when vomiting is well established isolation is essential and best results gained by intravenous glucose solution or by nasal feeding into the duodenum of such a mixture as recommended by the St. Louis Maternity Hospital of skimmed milk 1500 c.c., dextri-maltose with vitamin B 90 grams, Haliver oil 20 to 30 minims, orange juice 200 c.c., starting with 50 c.c. every hour and increasing to 200 c.c. at longer intervals. For good results in the cases of severe vomiting it is necessary to keep the patient under the influence of the drugs mentioned. The importance of vitamin B apparently is very real to prevent the polyneuritis which sometimes follows long periods of severe hyperemesis gravidarum.

#### ANEMIA OF PREGNANCY

If the expectant mother feels well at any time during her pregnancy it is during the middle three months, but even then she should be kept prepared for the needs of the latter months. One condition to be avoided is the secondary anemia which so often develops during the latter half of pregnancy. I have been surprised that I rarely find in routine examinations of the blood of obstetrical patients a hemoglobin of more than 70 per cent, and many times find only 50 to 60 per cent in patients going about their daily work. Galloway,<sup>33</sup> in investigating 382 patients, found an average hemoglobin of 65 per cent and red cells of 3.95, a progressive anemia developing as pregnancy advances with a greater reduction of hemoglobin than red cells.

Practically all the iron the adult body possesses is in active use. There are no large stores laid up as with calcium. There should be a steady intake of iron to make up any loss. This is imperative in the pregnant woman who supplies the growing fetus with its iron. Milk is practically of no importance as a source of iron. However, iron is a trace component of most natural foods and a generous diet is not deficient in iron.

Women need a greater iron intake than men, because of the demands of menstruation, pregnancy and lactation. From the work of Hart, Steenbock and Waddell and Elvehjem<sup>34</sup> it is apparent that copper must be present for the conversion of inorganic iron into hemoglobin. Copper is fairly well spread in foods and its quantitative needs are not great. Since the sources of copper are similar to those of iron, I do not believe that it is necessary to worry about copper in the diet if we watch out for iron. It would appear important that, in keeping up a good iron percentage in the diet, we maintain a good protein intake.

Beside the dangers of infection to the anemic individual, there is the danger of premature labor and stillbirth for the fetus. I have had recently two cases, one a premature labor at seven months

and one at full term, with prenatal fetal deaths, where, I am sure according to the history of symptoms and the findings, the only cause was a severe hypochromic anemia developing rapidly during the pregnancy.

An important work on anemia in pregnancy has been done by Strauss and Castle.<sup>35</sup> There are two types of anemia in the pregnant woman, the hyperchromic or pernicious type of anemia, and the hypochromic or secondary type. As a rule, no matter how anemic the mother, the infant is born with a normal hemoglobin. The infant must procure all of its iron from the mother and in this way there is a drain on the maternal organism similar to a chronic blood loss from a hemorrhagic condition.

The pernicious type of anemia is not so common during pregnancy as the secondary type. In the thirty-six anemia cases of Strauss and Castle, six were of this type.

In the treatment of the more common hypochromic anemia of pregnancy, inorganic iron alone is specific as for any idiopathic secondary anemia. Liver or stomach preparations are not necessary. If iron can be supplied in the diet, well and good, but more rapid response is desirable and obtained by the addition of iron in the form of such a preparation as iron and ammonium citrate in doses as recommended by Rowland,<sup>36</sup> of 90 to 120 grains a day, or as a 50 per cent solution taken in dram doses in fruit juice or broth through a tube.

It is generally assumed that an infant will take care of its iron needs in spite of the mother's anemia, but L. G. Parsons<sup>37</sup> contends that congenital anemia occurs due to dietary deficiencies or nutritional anemia of the mother. He states that two-thirds of the iron present in the body of the human infant at full term is laid down during the last three months of gestation. The premature infant and those of multiple births are very likely to be anemic. However, a high grade anemia may be found in newborn infants when the mother's blood is entirely normal. It would seem probable, then, that the anemia of some newborn infants may be due to some hematogenic deficiency in its own metabolism. As a rule, an infant is born iron-rich, with a surplus of iron and copper in its liver. This is evolutionarily desirable to tide the infant over the nursing period of iron-poor milk.

#### CALCIUM IN PREGNANCY

Calcium is one of the very important salts of the body. It seems to be essential to a large part of the body activities. L. S. P. Davidson<sup>38</sup> states that an anemia will not develop on a low iron intake, unless there are unusual outside factors, if a diet rich in calcium is supplied, but will if the calcium is reduced. Its importance to the coagulation of the blood is known, but its practical im-

portance in hemorrhage control had not been definitely shown. The value of calcium therapy in eclampsia has not been unquestionably demonstrated in any clinical series of importance that I know of.<sup>19, 20</sup> Its most obvious function is in the formation of bone and in its storage in bone. Its metabolism is closely associated with that of phosphorus. Calcium is found in the body chiefly in the form of calcium phosphate and calcium carbonate.

The most important source of calcium is milk or cheese. Without a quart of milk or a quarter of a pound of cheese a day it is difficult to supply the necessary calcium by diet alone. The minimum daily calcium requirement is 0.45 gm. (0.63 gm. calcium oxide) but the desirable is 0.70 gm. (1.0 gm. of calcium oxide). One thousand c.c. of cow's milk furnishes 172 gm. of calcium oxide, 1,000 c.c. of human milk 0.42 gm. About 70 per cent of the calcium of mother's milk is retained, while only 30 per cent of that of cow's milk is retained.<sup>21</sup> An excess of calcium in the diet is desirable during pregnancy to make up for variations in absorption. No other food except milk is rich in this mineral.<sup>22</sup> Calcium is absorbed through the intestines in the presence of an acid media. Lactose in the diet assists the absorption by causing an acid fermentation in the bowel. Calcium is best given one and one-half hours after meals. Absorption is hindered by fats which form insoluble calcium soaps. The proper ratio of calcium to phosphorus 2:1 or 1:1 is necessary, since an excess of phosphorus causes an increased excretion of insoluble calcium phosphates.

Vitamin D is necessary to the metabolism of calcium. Whether it is active by aiding in the absorption of calcium, or in the intermediary process of storing it in the bone trabeculae, or both, is not definitely known. Parathyroid hormone is perhaps instrumental in keeping available calcium in the blood as needed by causing it to be extracted from the reserve in the bone trabeculae. All of these many factors when balanced together make possible a normal blood-serum calcium.

The pregnant woman who does not take milk products and avoids the sun by choice or necessity will no doubt be safer with an addition to her daily diet of 60 to 80 grains of a calcium salt and 15 to 20 drops of viosterol.

As with other materials necessary for the fetal development, the maternal blood supplies calcium and phosphorus to the fetus whether she has them to spare or not. Mull and Bill,<sup>23</sup> with others,<sup>24</sup> observe<sup>25</sup> an unfavorable or negative calcium and phosphorus balance in the mother's serum during the latter part of pregnancy, often lasting through lactation. Some women store up an excess calcium reserve during pregnancy, which would seem naturally wise. Notwithstanding this, the infant is born calcium-phosphorus poor and its bones are poorly calcified which is no doubt nature's way of making pliable bones for an easier birth.

Mother's milk, which is normally calcium-rich, is expected to begin at once to supply the deficiencies of the fetus after birth. For development during gestation the fetus needs about 34 grams of pure calcium.<sup>2</sup>

Booker and Hanamann<sup>26</sup> state that, "with respect to the deposition of the inorganic constituents of its bones, the normal human fetus may be regarded as entirely parasitic on the maternal organism, since large differences in calcium and phosphorus intake by the mother did not affect the degree of calcification of the tibias of the newborn infants." But, recently several cases of fetal chondrodystrophy<sup>27, 28</sup> have been reported. The contention is that "the same factors that affect the bones and cause rickets later in life attack the cartilage and cause fetal chondrodystrophy in fetal life." These factors are variations in vitamin D, parathyroid hormone and disturbed mineral metabolism.

Bass and Karelitz<sup>29</sup> report three instances of spasms occurring in newborn infants with the signs of tetany, and which yielded to intravenous calcium medication. Perhaps if we were on the watch, more of our unexplained cases of convulsions of the newborn would be found to be of this class.

While it is perhaps unusual for the child to be born with marked signs of calcium deficiency, the mother no doubt suffers frequently. I have found it characteristic of free-clinic patients to have teeth and gums in very poor condition, influenced, I believe, by a lack of calcium and the necessary vitamins in the diet they are capable of obtaining. Beierlein<sup>30</sup> sums up the dental opinion when he states, "Any dental care that is necessary should be attended to during pregnancy. The present opinion is that local conditions in the mouth are of relatively little importance and that dental caries is dependent on a disturbance of the calcium-phosphorus metabolism."

During the last twelve weeks of pregnancy the calcium content of the fetus increases six times.<sup>31</sup> During the latter months of pregnancy women not infrequently reveal clinical signs and symptoms of calcium deficiency. These are classed as the tetanoid syndrome:<sup>31</sup> cramps in the legs, thighs and arms; difficulty in walking; tingling and numbness in the fingers; restlessness and irritability of disposition. In severe cases the mother may go into true tetany. The remedy for the mild type is calcium and phosphorus plus viosterol, 20 to 30 drops a day. In the severe forms with tetany, of which I have observed three in the last three years, large doses of calcium and viosterol were given, with para-thor-mone in 10 to 20 unit doses given every other day until the condition improved. The noticeable thing to me was that the irritability and weakness of the patient lasted for many weeks after the patient was delivered during which time calcium and viosterol or cod liver oil were continued. At the same time special attention was paid to the mineral content of the diet.



Dieckman<sup>32</sup> believes the symptoms and signs of the tetanoid state are those of early osteomalacia. Many weeks or a negative calcium-phosphorus balance are needed to produce bone changes detectable by the x-ray. It is no doubt safe to say that the woman having frequent pregnancies and living on a very deficient diet, with no outdoor activity or sunlight, is constantly in danger of developing the tetanoid state. I have frequently heard these women remark how much better they feel when a quart of milk has been obtained for them, together with cod liver oil in doses of two teaspoonsful per day.

The work of French and Bolser<sup>33</sup> on the blood calcium in lactation is interesting and would indicate the need for a good calcium reserve being stored up during the latter part of pregnancy. Their work revealed that in women with normal serum calcium levels at the termination of pregnancy there was a drop of 10 to 20 per cent in the serum calcium at the time of engorgement of the breasts three or four days after delivery. The serum calcium rapidly returned to normal. In women with a low serum calcium at the end of pregnancy there was an actual increase by the time of engorgement of the breasts. This is explained by an early stimulus by the parathyroid hormone in the woman with low serum calcium calling out an early increased supply from the bone trabeculae to be prepared for the demands of the secreting breasts. This would be nature's way of protecting her against an acutely developing hypocalcemia which the woman with normal calcium could stand, but not the woman who has a low serum calcium with which to start lactation. The signs and symptoms experienced at the time of fever associated with breast engorgement in the woman may not always be due to infection as usually assumed. They are similar to those of hypocalcemia in pregnancy: backache, prostration and slow gain in strength.

#### THE DIET AND FLUIDS IN LATE PREGNANCY

During the last three months of pregnancy the normal diet should be maintained, at least the minimum basal diet. It is unwise to restrict carbohydrates too rigidly. As stated, they are important to prevent the acetone type of acidosis. They should be of sufficient quantity to keep up the glycogen reserve in the liver and muscles. For the benefit of the fetus the maternal blood should be kept rich in sugar when there is danger of impaired placental osmosis due to infarctions when toxemia of late pregnancy is present.

Glycosuria is not uncommon in the last months of pregnancy. It is most often due to lactose in the urine which is not of great importance. Lactose can be readily differentiated from glucose by the fermentation test. Estimation of the blood sugar will reveal a true diabetes mellitus or merely a renal or alimentary diabetes. True diabetes

should receive the careful attention it deserves at any time.

I believe there is a tendency to restrict the proteins too much in the later months of pregnancy. The desirable effects of proteins outweigh the feared effects of nitrogenous waste products. Physiologists<sup>34 35</sup> remind us that there is an important relation between energy development and protein metabolism, for the food catalysts or enzymes are apparently derivatives of, or are in close association with, the protein molecule. There is a definite wear and tear on the body proteins and an intake of one gram of protein per kilo of body weight a day is considered desirable and three-quarters gram essential to compensate for this protein loss and for maintenance. A quart of milk will supply about thirty grams of protein.

Edema, commonly present in the latter months of pregnancy, may be due to many causes, especially a disturbed water and salt balance; a nutritional edema; or one associated with nephritis. To correct edema the water intake must be restricted until the proper adjustment is made between the intake and output. In general, fresh cool water, lemonade or orangeade should be taken freely when there is no edema or kidney impairment, and even then is desirable if the water can be excreted. In chronic nephritis with a maximum kidney impairment and loss of all flexibility urine cannot be excreted above a specific gravity of 1010, and abundant urine is necessary to carry off even normal waste products. In any case the quantity of urine excreted in twenty-four hours should be at least 1500 c.c. to adequately carry off waste products.

Also, the sodium chloride intake must be adjusted. The sodium and not the chlorine ion is the important one. If no salt is taken except a reasonable amount used in the kitchen, enough will be taken, or 2 to 5 grams. All raw materials except milk are poor in sodium chloride. If less than five grams a day are taken for long, loss of appetite and weakness will develop. As substitute for flavor one may use onions, vinegar, lemon juice, mustard or spices. According to Fishberg<sup>36</sup> there is no evidence that spices irritate the kidneys.

Nutritional edemas are not uncommon and proteins are essential to keep a proper water balance. All metabolic conditions that influence the permeability of the membranes through which fluids pass are important. Christian<sup>37</sup> states that water exchange between the capillaries and the tissue spaces is largely controlled on the one hand by the osmotic pressure of the serum protein and on the other by the hydrostatic pressure within the capillaries.

Recently devised tests demonstrate<sup>38</sup> that proteins do not injure the kidneys except in extreme conditions and that there is not an excuse for restricting proteins from the standpoint of the kidney function except in the severe, late stages of disease. On the contrary, Mosenthal<sup>39</sup> states that the protein should be restricted in nephritis only when

the blood urea nitrogen reaches 80 mgm. per 100 c.c. of blood and retention uremia is unavoidable. To do so before leads to the wasting of body tissues and the development of anemia, making it impossible for the body to carry on its routine physiological functions and lowering the resistance of the body to infections. With albuminuria, proteins are necessary in the diet to compensate for the wasting of the serum protein.

Chronic glomerulo-nephritis is frequently complicated by pregnancy and is a serious condition. Hypertension, albuminuria and headache in early pregnancy and a nonprotein nitrogen of 40 mgm. or more in 100 c.c. of blood during late pregnancy means a chronic nephritis. It is desirable to get the patient to a state of pregnancy when the child may be born alive, especially if the patient is very desirous of having a child; but I believe it should be accomplished and will be best accomplished by absolute rest in bed while the symptoms are marked, by restriction of salt, and maintaining a fluid balance by adjusting the intake to the output as suggested by Arnold and Fay,<sup>40</sup> but not by restricting the diet below that amount necessary for maintenance. McLester<sup>41</sup> recommends that carbohydrates supply 50 to 60 per cent of the energy to make sure that proteins will be used for tissue repair and not for energy. He recommends that the proteins be of high biological value and that one quart of milk, two eggs and one serving of meat will meet the protein needs and do no harm to the kidneys, even in severe cases of nephritis unless coma is likely.

If, by careful watching as above indicated, improvement does not take place, pregnancy should be terminated and subsequent pregnancies should be forbidden. The fetal mortality with chronic nephritis and pregnancy is about 45 to 50 per cent (21 per cent of viable babies in Stander's clinic). Stander<sup>42</sup> has stated that the maternal mortality within ten years after childbirth associated with chronic nephritis is over 40 per cent, while the average mortality for women between the ages of thirty and forty years is only 7.5 per cent. The ordinary mortality statistics are not a true story in that they do not usually include deaths from this cause, except as associated with the immediate pregnancy and puerperium. I feel that to restrict the diet below the necessary minimum for more than a short time, as to start with a milk and fruit diet for a few days, only shortens the life of the individual to no advantage. A quart of milk and the juice of three or four oranges equals only about 795 calories and is not enough to maintain a sick person long.

It is the opinion of Stander<sup>43</sup> that in eclampsia and eclampsia, nephritis plays no part from the etiological standpoint. These conditions rarely result in damaged kidneys, and renal functional tests are usually normal. They are apparently distinct entities from the chronic nephritis complicated by pregnancy. The chief lesion of eclampsia and

eclampsia seems to be in the liver. The definite etiology has yet to be determined. It is my experience that this type of case can be maintained on a normal minimum diet if it is watched from the beginning for signs and symptoms of trouble, and if especial attention is paid to proper rest, to eliminating infections, to the restricting of salt to the minimum, to maintaining a proper water balance, and to keeping the urine alkaline by the diet or the aid of potassium acetate. In this manner eclampsia will usually not develop.

So frequently we see the advice, "force fluids" and "intravenous saline," in the treatment of nephritis and toxemia of pregnancy, but it has been shown by Janney and Walker<sup>44</sup> that the kidneys in normal pregnancy have more difficulty in excreting fluids than ordinarily, and Harding and Van Wyck<sup>45</sup> have shown that, although when normal the pregnant woman will adjust herself to excess salt, with the giving of hypertonic salt solution to the toxemic patient, there is a rapid development of serious symptoms and even convulsions. The latter conclude that protein and fats are not important in the production of toxemia of late pregnancy.

In the case seen when the toxemia leading to eclampsia and eclampsia is well advanced, a very restricted diet with bed rest must be used until improvement begins. This can be a quart of milk and three or four oranges. With impending eclampsia nothing is given by mouth during the first twenty-four hours, but glucose in distilled water is given intravenously. Then 1,000 to 1,500 c.c. of fluid may be allowed, chiefly the foregoing foods, and the quantity of fluids increased as the output will indicate it. With improvement, I feel it a disadvantage to continue for long the restricted diet, as it makes the patient unable to resist the primary disease. In this condition as in the nephritic type, when there is no improvement and signs and symptoms of impending convulsions develop the pregnancy is best terminated to avoid the eclamptic state. Fortunately the condition of pre-eclampsia usually occurs when the child is viable. Also, subsequent pregnancies more frequently than not will go to term without the development of toxemia.

#### CONCLUDING COMMENT

We hear much of the forgotten man, but how often do we hear of the forgotten woman? Unemployment to the man means lolling on the front steps or on the courthouse square. To the woman it means taking care of the four to eight children she already has, while carrying the next one or nursing it. And she does it on a ration of bacon, beans, bread and perhaps black coffee. No milk, no butter, no citrus fruit, no other meat except the fat pork, no eggs and rarely fresh vegetables or fruits. Any of these luxuries, if obtained, are sacrificed to the always hungry children and husband. Besides the clothes washing of her own family, not infrequently I have found her taking in other people's washing. Whatever clothes there



are she mends or makes. Is it any wonder that she will admit when questioned closely that she is tired and worn out? These are the gaunt and weary, sometimes obese and edematous, but usually anemic women with a jaw full of rotting teeth, to be seen in our industrial cities.

Milk is not scarce. The dairies will not take the supply. Producers feed it to pigs. Inorganic iron is not rare or expensive. I believe the state gives the mothers of its future citizens little practical and understanding consideration. Very often the woman cannot remember when she ever felt good, or that there is any other way to feel but tired out and weary in body and mind.

If these mothers must have babies, and they usually have little to say about it, then they should be protected individuals. I believe that every mother-to-be and every mother nursing her child deserves and should be able to obtain without difficulty a quart of good milk a day for her own exclusive use and the quantity of inorganic iron deemed necessary by her physician.

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DISCUSSION

K. M. BEIERLEIN, M. D., Fort Wayne: If a correct interpretation of weight changes during pregnancy is to be made, a number of factors upon which

they may depend must be borne in mind. In the early months, loss of weight may result from toxemia, with or without the distaste for food, nausea or vomiting that are so common during that period. Or it may be due to an associated constitutional disease. Later in pregnancy a loss of weight may mean fetal death, disappearance of edema, or absorption and elimination of an excessive amount of amniotic fluid.

Within the last year a case was brought to my attention in which loss of weight during the last trimester was attributed to diabetes mellitus since some reducing substance was present in the urine. In reality it depended upon intra-uterine fetal death, resulting from twisting of the cord, a possibility which was not thought of until labor supervened. I have recently had a patient who lost 1½ pounds in the seventh month coincident with the disappearance of moderate but definite hydramnios. In another, a loss of 3¾ pounds between the eighth and ninth months was due apparently to the elimination of edema fluid.

It may be well to say that we cannot predict the weight of the child from the amount the mother has gained.

There is a general clinical impression, supported by statements in the literature, that the late toxemias are usually associated with excessive gain in weight. Some authors state that a gain of over 25 pounds predisposes to toxemia, and they attempt to limit the gain to that amount by dietary restrictions if necessary. It is my belief that undue gain of weight depends more upon edema than too liberal diet, and that it usually is a result instead of the cause of toxemia. The fact that more than ten pounds of fluid may accumulate in the tissues before clinical edema becomes evident is of importance in a consideration of weight changes during pregnancy. In this connection it must be remembered that some of the most serious cases of eclampsia occur in the absence of edema or undue gain in weight.

The usually accepted normal gain in weight during pregnancy is between 15 and 20 pounds. In my experience the average gain has been somewhat more than that—around 23 pounds. Too rapid gain of weight may depend upon other factors than too liberal a diet or edema. I have seen it result from developing hydramnios, and it is possible that a molar pregnancy might produce it.

Some attention has been given, especially by Zangmeister, to excessive gain in weight during the latter part of pregnancy as an advance sign of impending toxemia. There is no question that a greater than average gain is more frequent in toxemic women, but Siddell and Mack have shown that such a gain, in advance of other definite signs as hypertension and albuminuria, is no more often followed by toxemia than by normal progress of pregnancy. They conclude that excessive gain in weight alone during the last four months is of questionable clinical value for the early recognition of impending toxemia.

They also studied weight changes during the last four months in relation to age, parity, and body build, and found that age was of some importance, younger women gaining more than older. Parity and body build had little or questionable influence.

As Dr. MacKenzie has said, the advent of pregnancy places no particular strain upon the mother in regard to protein, carbohydrate and fat, since these are present in sufficient amount in the average American diet. Furthermore, the metabolic processes in which these classes of food are concerned are carried on with greater than usual economy during pregnancy. Not so with certain minerals and accessory food substances which, more often than not, the prospective mother gets in insufficient amounts to meet her needs. If we are to serve the best interests of the mother and her offspring, her diet during pregnancy must be arranged to contain sufficient calcium and phosphates and vitamin D to insure normal calcium phosphate metabolism, sufficient iron to prevent anemia, and sufficient iodine to protect against goiter. It is these aspects of dietary supervision that I believe are of greatest importance in normal pregnancy.

The etiological relationship of diet to the toxemias of late pregnancy is by no means proved. The varied dietary factors to which eclampsia has been attributed are evidence of a lack of definite knowledge about the subject. Some believe that too liberal a diet, without specific restrictions, resulting in excessive gain of weight, predisposes to toxemia. Some regard a carbohydrate deficiency of importance. Others incriminate dietary protein, depending upon such general evidence as the fact that the incidence of eclampsia in Germany was lessened when protein food was diminished as a result of war. It is interesting to note that the number of cases increased in 1919, although limitations of diet remained essentially the same. The fact that some of the end products of protein metabolism must be eliminated by the kidneys, and that some renal injury usually is an accompaniment of toxemia, may be valid reasons for regarding protein with suspicion. On the other hand, the inability to demonstrate definite changes in renal function, and the absence of any significant retention in the blood of protein metabolites in the pre-eclamptic toxemia and eclampsia, raise the question of how this variety of food produces deleterious effects, if it in fact does so. The milk diet, although high in protein content, is rather generally recommended in cases of toxemia, more evidence of the inconsistency of empirical and speculative knowledge. In my experience, pre-eclamptic toxemia is potentially progressive. The really serious cases are little influenced by diet or medical treatment. If fatal results are to be avoided, pregnancy must be interrupted before serious symptoms supervene. The dietary factor must be regarded as one of the many hypotheses



that have been advanced to explain the development of eclampsia.

The frequency of hypochromic anemia during pregnancy is not generally appreciated. The majority of women when pregnant develop it. The degree of anemia tends to increase as pregnancy advances. In many instances the condition will be missed unless looked for. The widespread use of cosmetics in vogue today makes recognition of anemia from external appearances difficult. In prenatal care an estimation of the hemoglobin is probably exceeded in importance only by observation of the urine and blood pressure. I have seen anemia with edema of the legs mistaken for and treated as toxemia. The prevention or correction of hypochromic pregnancy anemia is important, not only to relieve such symptoms as faintness, easy fatigability, and so on, but to bring the prospective mother to the end of her pregnancy better able to withstand such complications and accidents as may arise.

When the changes in the maternal organism brought about by pregnancy are considered, it is not surprising that anemia of varying degree appears so frequently. Blood dilution would tend to reduce the hemoglobin and number of red blood cells per unit volume, although slightly. Dietary deficiency, especially in the early months, and disturbed gastric digestion associated with hypochlorhydria and achlorhydria, interfering in some way with the assimilation of the iron that is ingested, are common in pregnancy. It is readily seen how, under these conditions, combined with the drain of the fetus on the maternal iron store, the function of hematogenesis will be strained.

In contrast, pernicious, or the hyperchromic form of anemia of pregnancy, is rare. It is due to a relative or temporary deficiency of the specific hemogenic substance produced in normal gastric digestion, and yields to liver extract as does ordinary pernicious anemia. Although usually distinct, there are some mixed forms of pregnancy anemia requiring both iron and liver extract for their successful management.

With respect to the importance of the maternal diet to the unborn child, it is essential to remember that in case of dietary deficiency the mother suffers first. Conversely, if the mother's diet is adequate for her needs there need be no concern about the nutrition of the child before birth. Marriott states that the fetus, by reason of the extraordinary growth impulse of embryonic tissue, is able to remove nutrient materials from fluids in which the amounts present are minimal. It may thus appropriate carbohydrate, protein, and minerals from the mother, even though this leads to a depletion of her fixed tissues. It is when the dietary deficiency involves the vitamins that the fetus is apt to suffer, since the mother cannot synthesize them or store them to any important extent in her body. The maternal diet must contain sufficient vitamins or the fetus will not receive them.

There is considerable evidence in the literature that rickets appears earlier and is more frequent in infants whose mothers' diets have been lacking in vitamin D. The teeth, likewise, depend for their normal development during intra-uterine life upon sufficient of the vitamins A, D and C. It is evident that the vitamin content, particularly of the maternal diet, is important for the child. On the other hand, it is equally important for the mother. The intimate interrelationships existing between the mother and her unborn child make it impossible to consider one with the exclusion of the other.

## HISTORY OF BIRTH CONTROL IN AMERICA

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INDIANAPOLIS

Every new endeavor to better public health passes through a difficult early stage. Advances in the control of contagious disease, pain in labor, asepsis in surgery, and the adoption of general vaccination have all been made against large odds of timidity and prejudice, even among those of our learned professions. Although in most instances their inception originated among members of the medical profession, in many cases their chief sponsorship to successful development has been mainly of lay origin. An outstanding example is the international fight against tuberculosis, maintained by the lay organized sale of Tuberculosis Christmas Seals. Another is the organized lay effort for the control of cancer.

The life history in America of that form of preventive medicine commonly known as birth control, sometimes phrased as "Voluntary Parenthood," has been certainly no exception in not being exempt from a series of continuous obstacles, or the amount of lay support contributed to it.

Four things distinguish this movement from others: First, it is the most recent of the larger health measures, its origin having begun but twenty years ago; second, it had been to an astonishing extent a personal movement; third, it has asked for legislation last instead of first, preferring to arouse and educate people before going to Congress to demand a law; and fourth, it has proceeded from the simple to the complex.

Although Robert Dale Owen as early as 1830, and Dr. Charles Knowlton as early as 1832, viewed seriously the problems of population and birth control from Malthusian, economic, social and eugenic points, and through their respective publications, "Moral Physiology" and "The Fruits of Philosophy," enthusiastically supported and laid down principles so fundamental as to be adopted almost in toto by present day thought, the progress of the birth control movement in America lay quite dormant until the present generation. The story of its recent impetus is so inextricably interwoven with the life history of its author and lifelong

sponsor, Margaret Sanger, that to narrate one is in a large measure but to relate the other. Indeed, one finds it almost impossible to extricate the life deeds of the one from the salient events of the other. Either is filled with adventure and drama, and portrays most vividly the remarkable, dynamic working power of a strong, unrelenting personal conviction, not often equalled in American history.

Margaret Higgins was born in 1884 in Corning, New York. She was the sixth-born of eleven children, and was originally red-haired. Her father, a stonecutter by trade, was born in northern Ireland, but fought in our Civil War under General Sherman, was of agnostic belief, and a great admirer of Robert Ingersoll. He did all the family doctoring—treated their fractures, pneumonias, and typhoids, and attended his wife at all her deliveries. His only drug was whiskey. He died at the age of eighty. Her mother was a Catholic; she was of frail build, but was courageous, fearless, and independent.

Very early in her childhood Margaret associated poverty, toil, unemployment, drunkenness, cruelty, quarreling, fighting, debts, and jails with large families. She had observed that the people of wealth lived on the hills away from the river and factories and that they had but few children, while the poor, with large families, lived in the flats down by the river. Also, that the people on the hills owned their homes, dressed their children well, and kept their houses and yards tidy and clean, and that mothers often took their children shopping with them, and that the best in life seemed to be a matter of course for these children. In contrast, Margaret and the rest of the less favored youngsters did not seem to know where they belonged; they were forbidden to do the things they wished, and seemed to be watched constantly by parents, teachers, ministers, and policemen.

In school Margaret stood at the head of her class, and handled subjects well advanced for her age. With financial help from older brothers and sisters, she entered Claverock College, an institution covering high school and preparatory work, and during the three years' stay in this school she excelled in recitation and acting. She prepared and delivered an address upon woman suffrage, a topic in which she became keenly interested. During the following year she was summoned home by her father to attend her mother who had been growing thinner and frailer since the last baby was born. This service stimulated her to delve into books upon nursing care and created a desire for medical knowledge. A few months later the mother died of tuberculosis at the age of forty-eight.

Within a year following her mother's death she began plans to enter Cornell Medical College, but the necessary finances were too severe. A happy compromise occurred when she was accepted as a probationer nurse in a new, small hospital close to New York City.

One evening at a hospital in New York where she was taking a postgraduate course, she attended an informal dance given for the staff, internes, and nurses. Her dancing partner, upon being summoned to the door to inspect some blueprints for a new home he was building, asked Miss Higgins to accompany him and look over the plans. The waiting architect was a dark-complexioned young man with fiery eyes, and was none other than William Sanger. Within six months they were married. Plans for a trip to Paris where Mr. Sanger was to continue his studies were soon thwarted in that within a year Mrs. Sanger, in addition to being pregnant, was pronounced a victim of incipient tuberculosis. She went to the Adirondacks to regain her health, but returned to New York for the birth of the child. After recovery, she, the infant, and nurse returned to the mountains, notwithstanding finances were much depleted. Eight or nine months later the renowned Dr. Trudeau advised her to separate from all personal responsibilities and go to Saranac. She interpreted this advice to mean a long, lingering illness and eventually death. Early the next morning, with the infant and nurse, she took a train for New York. Fortified with unending courage and indomitable optimism, she spent the next six years combating her condition, finally apparently victor.

A second son was born five years after the birth of the first, and twenty months later, a daughter. The latter died of pneumonia in 1916. The two boys, one now having graduated from Yale, the other from Princeton, are at present enrolled as medical students at Cornell, one a freshman and the other a junior.

Mrs. Sanger had herself learned the importance of spacing babies, and was abhorred when she learned of a law which forbade mothers obtaining such knowledge.

Early in 1912, because of her interest in social work, and for remunerative reasons, she took up social work. This field naturally took her to the lower east and west sides of Manhattan, those sections of that great metropolis where approximately 160 babies were born per acre per year—a veritable human spawning ground—a section where homes might well have been likened to human rabbitries, except for the condition of disease and disorder they presented. Children were cuffed, kicked, and chased about. Unemployment, crime, and drink prevailed—here existed a strata of society breeding theft, filth, perjury, and brutality—all elements that contribute materially to many most difficult social problems.

Here Mrs. Sanger observed, "Ignorance and neglect go on day by day; mothers have no professional care; children are born in the presence of other children, many breathe but a few hours; pregnant women toiling early and late to give food to four or five children, always hungry; boarders taken into homes where there is not sufficient room



for the family, little girls eight and ten years of age sleeping in the same room with dirty, foul-smelling, loathsome men; women whose weary, pregnant, shapeless bodies refuse to accommodate themselves to the husband's desires find husbands looking with lustful eyes upon other women, sometimes upon their own daughters six and seven years of age."

"Abortions, almost as numerous as births, are both medicinally and mechanically crudely performed. The victim is sometimes taken to the hospital, and not infrequently does not return."

This state of affairs created a nightmare for Mrs. Sanger. She could see no reason for such waste of mother life, no right to exhaust women's vitality and to throw them upon the scrap-heap before the age of thirty-five.

It was in the midst of such surroundings that a very precipitating event in the history of birth control in America occurred.

Mrs. Sanger had been called down to Grant Street, on the east side, to attend a Mrs. Sacks, twenty-eight years old, mother of three children, wife of an unemployed husband. This patient was desperately ill of peritonitis following a criminal abortion. The husband would not permit her to be taken to the hospital. After three weeks of diligent care, the patient was sufficiently recovered to dismiss the doctor and Mrs. Sanger. When the doctor arrived at his last visit Mrs. Sanger said, "Doctor, Mrs. Sacks is worried about having another baby."

"She might well be," he replied, and standing before the patient said, "Any more such capers, young woman, and there will be no need of calling me."

"Yes, yes—I know, doctor," said the patient, "but," and hesitating, "what can I do to prevent getting that way again?"

"Oh! ho!" laughed the doctor, "you want your cake while you eat it, too, do you? Well, it can't be done." Then, slapping her on the back, he picked up his hat and bag and departed with the remark, "I'll tell you the only sure thing to do. Tell Jake to sleep on the roof." (In defense of the doctor, it is quite likely that his advice was in full keeping with his knowledge.)

A few months later Mrs. Sanger again was called hurriedly to the same address. Just before she arrived, Mrs. Sacks had died. It was the same old story—she had become pregnant, had used drugs unsuccessfully, had employed a professional abortionist and the result was death from abortion.

This incident fired a revolution within Mrs. Sanger. Although heretofore her life had been more than turbulently interesting, the future was to bear her no special repose, and despite the disesteem that has become resident in the minds of some, history ascribes to her credit the following chronological record of important birth control activities and achievements:

Unable to obtain satisfactory knowledge upon birth control in America, she sailed to Europe to

learn their methods. She first studied social conditions in Glasgow, then proceeded to Paris. After returning from Paris she began to battle against the Comstock obscenity laws, dating from 1873, and classifying birth control information and equipment as obscene and therefore legally barred from the United States mails. She soon realized that she must do it alone, as she was unable to arouse either organization or individual support. She began her crusade by publishing the monthly magazine, *The Woman Rebel*, a rather "flaming" publication, championing freedom of speech and press, and denouncing organized conventionalities. Almost constant persecution in way of personal sacrifice, severe public criticism, court indictments, and imprisonment lay in close waiting. Because of articles pertaining to birth control, the March, 1914, and three subsequent issues were declared unmailable by the postmaster. This was a challenge to a free press and considerable public comment arose. Nevertheless, her indictment by the United States grand jury followed in August. She asked for a month to prepare her case and it was denied. That evening, after writing the judge that she would take a year instead of a month, she secretly boarded a train for Canada and sailed for England, at that time in the midst of beginning war. During the year she also visited France, Holland, and Spain, gathering material to prepare her for her court case upon return to America. Her largest contribution came from Holland. Her case was called for the last of December, but owing to increasing popular support for free speech and betterment of race, it was postponed several times and finally dismissed from the United States criminal courts. This evidenced for Mrs. Sanger the power of public opinion.

In 1916 she conducted a lecture tour across the continent to California. She spoke in nineteen cities, including Indianapolis, organizing and agitating as she went. In some instances she was locked out of halls and meeting places, and in others arrests occurred. However, she always buoyed herself with the thought that a principle for good will live. As her tour progressed, the public press came into play with increasing support.

Mrs. Sanger, her sister, and a graduate nurse opened the first American birth control clinic, October 16, 1916, in the Brownsville section of Brooklyn. This clinic was opened in full knowledge of the New York state law, which forbade any layman to give information to prevent conception to anyone for any reason. However, the law exempted licensed physicians on the premises of cure or prevention of venereal disease. This limitation had prevented Mrs. Sanger from securing the services of a physician in the clinic.

After a few weeks' operation, the clinic was raided by the police, and Mrs. Sanger, her sister, and an interpreter were taken to jail. Her sister was tried first and sentenced to thirty days. She immediately went on a hunger strike; later, fol-

lowing a release by Governor Whitman, was taken from jail, carried upon a stretcher.

While the sister was serving her sentence, Mrs. Sanger reopened the Brownsville Clinic, and was promptly rearrested. Her trial for the original opening of the clinic came up three weeks after that of her sister, and she too was confined to the workhouse for thirty days. She stated she did not fear going to jail but did fear being misunderstood. The Brownsville Clinic had been opened as a test case. After serving the thirty days, she met the charge on the reopening of the clinic by appealing to the Appellate Division. The judgment was affirmed; and the case was then carried to the Court of Appeals, and on January 8, 1918, was again affirmed; but the presiding judge issued a decision extending the application of the word "disease" further than that of "venereal" and applied it according to the definition of Webster, that is, "An alteration in the state of the body, or some of its organs, interrupting or disturbing the performance of the vital functions, and causing or threatening pain and sickness, illness, or disorder."

The imprisonment of Mrs. Sanger and her sister greatly publicated the idea of birth control. In order to handle the besieging mail and to build up a birth control organization to become powerful enough to change laws and the rising church opposition, it became necessary to open an office and start the foundation of a national league. This was soon followed, February, 1917, by the first issue of the *Birth Control Review*, edited by Mrs. Sanger. This has remained the official magazine of the organization. Although at first its sale was conducted only upon the streets of New York, incurring many erroneous arrests, it recently has had a circulation of some 13,000. Mrs. Sanger's time soon became crowded with lecturing and parlor meetings. In 1920 she again went to Europe to investigate improved methods of contraception. In Germany she found a new chemicalized jelly being used, and had a supply sent to New York. This has led to one of the most perfected methods in America today.

On November 10, 1921, the American Birth Control League was formed with Mrs. Sanger as its president, and later was incorporated under the laws of New York State.

On the evening of November 13, 1921, while attempting to address an overcrowded meeting in the Town Hall of New York City, upon the subject, "Birth Control; Is It Moral?" Mrs. Sanger was arrested and taken to jail. After several postponements the case was dismissed, however, not without creating much added publicity for the cause.

In January, 1922, she sailed for Japan to extend the message of birth control. On the way, she delivered a lecture at Honolulu. Although the Imperial Japanese Government at first refused her permission to land in Japan, she was finally permitted to do so. Much publicity occurred through-

out the island. On this trip she also visited Korea and China. The Oriental trip implanted the impression that "destitution and disease go hand in hand with over-population."

In the spring of 1925, Mrs. Sanger, heading a group, succeeded in bringing the Sixth International Birth Control Conference to New York City. In behalf of the conference she wrote President Calvin Coolidge urging the appointment of a birth rate commission to investigate uncontrolled birth rate, and the need of sterilization of the unfit.

In November, 1926, she went to London, planning to organize a world population conference. She succeeded in developing the necessary organization and secured arrangements for the meeting August 31, 1927, at Geneva, the meeting place of the League of Nations. Dr. William H. Welch, dean of American medicine, was one of the renowned attendants.

In 1923, Mrs. Sanger opened a clinic in New York City directed by a licensed physician, thus complying with the recent interpretation of the law. This clinic was set up as an experimental bureau of scientific research, the necessary funds finally coming from a private source in England. The first annual report contained 900 cases, and was presented at a public luncheon the following year. This stimulated the opening of other clinics in other cities.

In 1928 Mrs. Sanger resigned the presidency of the league to devote herself to the Clinical Research Bureau, and to launch an aggressive campaign for federal legislation.

On March 23, 1929, a raid instigated by a police-woman decoy was conducted upon the clinic by seven policemen. The doctors and nurses and case records were put into a patrol wagon and taken to the station. After postponed hearings, those involved were acquitted. It was disclosed that the raid here, as in the case of the Town Hall meeting, had been conducted by some private individuals without legal authority. However, the event not only created more publicity than any of those previous occasions but aroused most intense public indignation. The general press was free in its denouncement. Hundreds of distinguished citizens protested, among them Dr. Harry E. Fosdick, Mrs. Otto Kahn, Mrs. William Vanderbilt, Rabbi Stephen Wise, and Mrs. Henry Morgenthau, Jr. Leading members of the New York Academy of Medicine strongly disapproved, and many physicians who had not endorsed the clinic protested against the police invasion of medical privacy. Some of the case records have never been returned.

The clinic continued and is at present located at 17 West Sixteenth Street, New York City. It is the largest in the world. To date, the files present names in excess of 36,000 patients who have sought advice. Over 500 new patients are now being admitted monthly, and approximately 1,500 return each month for check-up.

In addition to developing better contraceptive methods, it was Mrs. Sanger's thought to make



the clinic a teaching center for physicians in that she had learned that most opposition to birth control among those of the medical profession came chiefly from those who knew nothing about the technique. Today the registry bears the names of hundreds of doctors from far and near who have come for instruction. The clinic personnel recently consisted of ten licensed physicians, twelve trained nurses, six social workers, three clerks, and one nursery attendant.

In 1931 Mrs. Sanger and her legislative committee presented a "Doctor's Bill" before Congress. The bill sought modification of the federal penal code which declared it criminal to induce or incite an individual to use any substance or article for the prevention of conception, and further declared it a criminal offense to send through the mails or other common carrier any article, drug, or information for the prevention of conception. This was the first congressional hearing on birth control. The bill was lost in the sub-committee. Among those present opposing the bill was Dr. Howard Kelly, Professor of Gynecology of Johns Hopkins University, while on the supporting side was the late Dr. J. Witridge Williams, Professor of Obstetrics of the same institution.

In 1932 Mrs. Sanger's legislative committee presented a similar bill and again was unable to get it before the Senate. However, upon recommendation of an Indiana representative, it was placed upon the calendar of the House.

In the 1933 session the measure obtained its first record vote in the Judiciary Committee of the Senate, nine members voting against it, six for it, and two not voting. One of the supporting voters was an Indiana senator. This record vote extended birth control the dignity of congressional recognition, certainly a different status than when Mrs. Sanger first issued her challenge twenty years previously.

In January of this year Mrs. Sanger and her federal legislative committee sponsored a three-day American Conference in Washington, D. C., on Birth Control and National Recovery, endeavoring to impress upon Congress and the administration the vital aid to the recovery program that birth control has to offer applied among those families now living on charity. And to this end, they further strengthened their forces to facilitate the passage of the proposed bill to amend the federal law.

However, Congress adjourned, holding the House Bill 5978 in the Judiciary Committee, and having had the Senate Bill 1842 recalled after it had reached the calendar and had been passed by unanimous consent.

It would be short of folly to utter the dictum to Mrs. Sanger, "It can't be done." She has heard it all her life and has continued just the same. Very few of us can logically endorse Mrs. Sanger's radical tactics. On the other hand, perhaps very few of us have ever been really ignited by a strong conviction. Fewer still would have the courage

to motivate such a conviction, especially if it meant certain stigmatization as a public menace.

Most of us may justly criticize her for her fanaticism, yet many a living project of today owes its being and success to the surmounting influence of fanaticism.

We are undoubtedly justified in being more than loathe to endorse her frequent defiance of our federal laws. Yet, in equal numbers we applaud the Boston Tea Party as an act of courage and justice, while to the British Government it was defiant and revolutionary.

So much for the militant wing of the movement. We shall now turn more briefly, but none the less respectfully, to the more conservative flank. It would be most unfair and ungenerous not to recognize the thousands of individuals and numerous organizations who have and now are lending increasing and important support.

#### RECOGNITION FROM ORGANIZATIONS

After its inauguration in 1913, the movement's first outside organized support came from labor and industrial unions. In the beginning, organizations and individuals were primarily interested for the sake of defending freedom of speech and press. As public interest became more aroused, popular opinion began to change as knowledge on the meaning of birth control increased. They began to see it in its true light, as a measure to protect maternal and infant health and render race betterment, and as an agent eliminating many social problems. Those dealing with organized charities, juvenile delinquency, divorce, poverty, and crime were particularly interested.

At the first American Birth Control Conference, which was held in New York, November, 1921, representatives from seventeen states attended. Many meetings were overflowing.

Soon the best minds in the country began to hold birth control not as a public nuisance, but as a national utility. The names of those supporting this view now fill many pages in the roster of America's best families. These public-spirited individuals represent the better elements in every progressive American community, and their list is made up of distinguished scientists, scholars, ministers, doctors, social workers, and lay citizens.

Universities were not slow to show their interest. Many included texts, lectures, and discussions upon the subject in their sociology departments. Editors of the daily press and periodicals began to keep alive the subject through articles and editorials. Political organizations have continued to register their endorsement, until today at least nine such bodies are supporting the movement.<sup>1</sup>

Since the strongest opposition to the birth control movement in America has always been from the church, it is to be expected that support from that source would be delayed. Although no official endorsement was forthcoming until less than five years ago, today practically all liberal churches have expressed approval in some degree. The

following religious organizations have given strong endorsement: 1. The Federal Council of the Churches of Christ.<sup>2</sup> 2. The Lambeth Conference of Anglican and Episcopal Bishops.<sup>3</sup> 3. Central Conference of American Rabbis.<sup>4</sup> 4. American Unitarian Association.<sup>5</sup> 5. Universalist General Convention.<sup>6</sup> 6. Special Commission on Marriage, Divorce, and Remarriage of the General Assembly of the Presbyterian Church. (It is to be noted that the Presbyterian Church has not yet officially acted upon this report.) 7. Social Relations of the National Council of Congregational Churches.<sup>8</sup> 8. Southern California, New York East, and New England Conferences of the Methodist Episcopal Church,<sup>9</sup> and most recently, 9. The Quaker organization, the Special Committee of the Woman's Problem Group of the Philadelphia Yearly Meeting of Friends.<sup>10</sup>

The Roman Catholic Church has been the most constant in opposing the use of contraceptives. This attitude no doubt has been recently bolstered by the Pope's Encyclical of 1930, which decreed against the practice. However, that the church does approve of birth restriction at least by the natural method is revealed by the strong endorsement and recommendation for lay distribution by high Catholic authority of two recent Catholic treatises, "The Rhythm of Sterility and Fertility in Women" and "The Sterile Period in Married Life." Thus it would appear that the issue hinges upon the method employed.

The Lutheran Church as such has not expressed its stand upon the movement, yet many of its able leaders have openly expressed widely divergent views as to support and denouncement.

The Christian Science Church has expressed no official attitude upon the subject.

Despite controversial positions taken by organized religions, the individuals involved display a harmonious attitude toward the movement. Careful checkings in well-established clinics show that the various faiths are represented in approximate proportion to their number in the local population. In many instances the Jew, Catholic and Protestant attend in equal numbers.<sup>11</sup> It may not be amiss to infer that this reaction from the indigent masses is primarily not one of disloyalty to faith, but rather the manifestation of an ages-old, fundamental, and very wholesome principle, namely, when a human crisis or distress becomes mutually severe, religious discrepancies are automatically set aside.

The tradition of conservatism of the medical profession has held it to a tardy position in lending its momentum to the movement. The thought that spacing babies constitutes an important branch of preventive medicine, and that it should be under proper medical supervision rather than lay control, finally aroused medical interest until the movement today has the endorsement of thousands of individual physicians and more than sixty medical groups, including district and county medical so-

cieties in twenty-six states, and nursing associations in four states.

Among the larger medical groups supporting the movement, some for medical and public health reasons only, others including economic indications, are the following:

1. New York Academy of Medicine.<sup>12</sup>
2. Section on Obstetrics, Gynecology, and Abdominal Surgery of the American Medical Association.<sup>13</sup>
3. National Committee on Maternal Health.<sup>14</sup>
4. Connecticut State Medical Society.<sup>15</sup>

Some of these organizations are recommending that medical schools include the teaching of contraception in their curricula, and that hospitals organize birth control clinics wherever needed, and include instruction for physicians. A very recent survey covering 71 medical schools reveals 27 of their number as now teaching contraception in at least some degree. The Michigan State Medical Society is at present in the midst of a two-years' statewide birth control survey. This promises to be the most important piece of work of its kind.

The American Medical Association has taken no official position on birth control. Resolutions have been brought before the House of Delegates for the past four years, but without approval. At the meeting held in Milwaukee, in June, 1933, Dr. Everett D. Plass, Professor of Obstetrics and Gynecology at Iowa State University, presented the resolution. Of the 112 delegates who voted, 46 voted in favor and 66 against it. This was considered a favorable expression. At its June, 1934, session held in Cleveland, a resolution approving the Senate and House Bills pending in Congress was presented by Dr. William Ellingwood of Maine. The record vote has not been obtained.

The American Birth Control League which now directs the national movement presents the following aims:

1. To reduce maternal and infant mortality.
2. To prevent criminal abortion. (May we interpolate that the league considers this one of its most important aims, feeling that this problem alone well justifies its existence. Be it feminist movement or what, an increasing percentage of women, regardless of race, creed, or station, are today demanding emancipation from unlimited and unregulated childbearing, and the admonitions of moralists and us of the medical profession are failing more and more to stem this reaction. Conservative figures show that 35 to 40 per cent of interrupted pregnancies are of criminal origin. The league's attitude toward this malpractice, and likewise that of therapeutic abortion, is two-fold; first, to prevent life rather than destroy it, and, second, to eliminate the associated maternal mortality and permanent injury. Surely it is a fertile field when one woman in fifty having an intentional abortion loses her life, and one in three is permanently injured.<sup>16</sup> And, to those of us directly in-



terested in the problem of maternal mortality, the situation becomes a paramount issue in that criminal and therapeutic abortion incur at least one-fourth of all maternal loss.)

3. To decrease hereditary disease.
4. To lessen prostitution.
5. To reduce child labor.
6. To relieve housing congestion.
7. To reduce the need for charity.
8. To prevent over-population.

Its program to that end is as follows:

1. To establish in every community clinics where the indigent poor may be given contraceptive advice by physicians.
2. To acquaint physicians throughout the United States with the most approved methods of contraception.
3. To work for the amendment of such laws as interfere with the prescription of contraception by physicians.
4. To demonstrate to the public the importance of birth control to the family, community, and race.

The fruition of the national organized birth control effort to date is expressed by over 150 active clinics, one of the more recent being Indiana's one and only, which was opened in Indianapolis last December. Approximately 150 of these clinics are operating under harmonious laws in 25 states, 6 in Hawaii, and 1 in Porto Rico. California has 30, New York 31, and Pennsylvania 16. All four states bounding Indiana have clinics, as follows: Illinois, 9; Michigan, 12; Ohio, 7; and Kentucky, 1.

Twenty-one per cent of all these contraceptive centers are in hospitals. Many hospital clinics give contraceptive advice for medical reasons only. Among this group are the following leading New York institutions: Woman's Hospital, Methodist Episcopal Hospital, New York Nursery and Child's Hospital, Lenox Hill Hospital, Mount Sinai Hospital, German Polyclinic Hospital, Sloane Hospital, Vanderbilt Clinic, and New York Infirmary for Women and Children.<sup>17</sup> However, the majority of clinics the country over include social and economic reasons.

Most clinics are financed from private sources, but a few operated in hospitals receive partial support from public funds. Some are partially self-supporting. In every clinic, licensed physicians are responsible for the medical policy, actual examination, fitting, and instruction of the patient.

A few full-time physicians receive a fair salary. In most instances the doctor serves for either a small fee or no fee at all.

In many clinics the work includes a regular health examination; in some, 30 to 50 per cent of the patients are referred to other departments. For this reason many are taking on the name of "Maternal Health Clinic." Some have taken on special interests, such as Pre-marriage Counsel, Parent Clinics, Marital Counsel, etc. Thus, in many instances the spacing of children is no longer the sole purpose.

The American Birth Control League has no clinic of its own—it represents the affiliation of state organizations. Neither has it any commercial interest in contraceptive materials, although it is constantly bombarded with such requests.

No clinic has ever closed because of lack of patronage.

In retrospect, the Birth Control Movement in America has proceeded from the simple to the complex. It began with one woman's desire to help other women, became a crusade for free speech, has progressed to scientific discussions upon population, has shaken courts and churches, and now is ably challenging certain of our federal laws so that their early repeal or modification seems more than fairly certain. And although much assistance can yet, and no doubt will, be given by Mrs. Sanger, it is more than prophecy that the future of the Birth Control Movement in this country will be directed by that less aggressive, but most powerful component, the American public.

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- 504 Medical Arts Bldg.

### THE RELATION OF MEDICAL LEGISLATION TO MEDICAL EDUCATION\*

WILLIAM N. WISHARD, M. D.  
INDIANAPOLIS

Perhaps in other states the relation of medical education to legal enactments may have varied somewhat from those in our own state, but our own experience is probably typical of the majority.

\* Read before the Indianapolis Medical Society, April 24th, 1934.

Recently the writer has somewhat carefully examined our early medical laws and their influence on medical progress.

Indiana was admitted as a state in 1816. The first session of the Indiana legislature convened at Corydon in the old State House (which is still standing) in December, 1816. In the same month the first medical law was enacted and was approved by Governor Jonathan Jennings on December 24, 1816. Some of its provisions are worth considering at the present date. One in particular is the fact that organized medicine was legally sanctioned in the provision of the first law by requiring that every physician who received a license should belong to the medical society in his locality. As shown by that law, it is evident that the population of Indiana was chiefly confined to the southern part of the state. There were but three judicial districts and they were in that part of Indiana, and the legislature provided for three medical districts corresponding to the then three judicial districts. This law of 1816 gives the names of the physicians who were appointed to constitute the three separate boards of medical censors, and required them to meet for organization on the first Monday of June, 1817, the first district meeting at Vincennes, the second at Salem, and the third at Lawrenceburg. Members of these three boards, at their first meeting, were required to designate a date and place of meeting for physicians of their respective districts and to give notice of such meetings to all practicing physicians in their districts, as to the day and place of meeting, and to examine applicants and to "license such as may apply to them and be deemed qualified." At this meeting it was provided by the law that licensed physicians meeting in the respective districts should organize a "Medical Society of the State of Indiana."

A further incentive to organized medicine is indicated in the sixth paragraph of the law, where a provision is made that if the first board of censors designated in the act, neglect or fail to perform their duties, that the physicians resident in the district where such failure occurs "may meet and organize as a body politic" and select their own medical censors, who shall thereafter constitute the legal examining board for their district, and that this board of censors shall meet at least every six months, for the examination of applicants for license. The board of censors, in addition to being endowed with authority to make examinations and to determine the qualifications of applicants, was also to "expel any member who might be guilty of indifference or immorality." It provided that physicians acting without license could not legally collect their fees, and it further provided that it should be unlawful for any physician or surgeon to charge or receive more than 12½ cents per mile each way for visits.

In 1825 a new law was passed, entitled "An Act to Incorporate Medical Societies." It provided for the organization of a body designated in the law

as the Medical Society of the State of Indiana, and it also provided for a district society in each of the three judicial districts.

Quoting from the required qualifications, the law of 1825 says: "The State Medical Society shall always have power, and it shall be their duty, as soon as practicable, to establish a uniform system of the course and time of medical study and the qualifications necessary for license, to give publicity to the same and require the district societies to conform in their examinations and rules thereto." In providing for the annual dues of five dollars, the law said that the money received should be applied "for the purpose of securing a medical library and apparatus for the encouragement of useful discoveries in chemistry, botany, pharmacy and such other improvements as the majority of the society may think expedient."

The licensing law of 1816 and the law of 1825 authorizing the incorporation of medical societies doubtless exerted, for a time, a stimulating influence on medical education, as no one other than a member of a medical society could be licensed to practice, and also in requiring the organization of an examining board and the publication of the educational requirements imposed on those who sought license.

However, the condition of the roads and the methods of travel seem to have had a major influence in causing the law to go into "innocuous desuetude." The late Dr. W. T. S. Cornett of Madison, Indiana, attended what he said was the last meeting of the Medical Society of Indiana at Indianapolis, probably in 1826. He was then practicing at Versailles in Ripley County, and says that he was elected as delegate under the 1825 law to this last meeting of this Medical Society of Indiana by his district society. The meeting was held in Indianapolis, and he came from Versailles to Indianapolis, sixty-five miles, on horseback, requiring "three days of hard travel through deep mud and over broken causeways," to reach this city. The meeting was attended by seven physicians, who met in the office of Dr. H. G. Mitchell, the first physician to locate in Indianapolis. Dr. Mitchell was president and read an address in opening the meeting. Dr. Cornett had prepared a scientific paper, but finding that none of the other members had prepared similar papers, he was too diffident to present his, and carried it home in his pocket without reading it.

The opening paragraph of the law of 1830 declares that it is passed owing to the defects of the previous laws and the fact that the State Medical Society authorized by previous laws "had never been legally organized." It gave greater power to the district societies and legalized licenses previously granted, and also legalized the previous action of the state society in dividing the state into twelve medical districts instead of three judicial districts. It, however, like the two previous laws, simply conferred authority, stating that the



medical societies "may" do as provided. A careful search of the statutes indicates that in 1838 this law was still on the statute books. However, it seems to have been inoperative, and the revision of the laws in 1843 does not indicate that the law was then in existence. In the search the writer made, no record was found of the repeal of either of the acts, but there is sufficient evidence to show that no medical law was operative after 1833 or 1834, and that the licensing district boards ceased to exist about that time. Then came a period of more than fifty years, during which there was no legal restraint on medical practice in Indiana. The law of 1885 was merely a registration law, and the county clerk was the judge as to whether the diplomas presented for registration were bona fide or not. Diplomas purchased at \$25 each from so-called diploma mills, without attendance at medical school, were probably accepted as valid in some instances.

In 1897 the present law of Indiana was passed. As illustrating its influence on medical education, it may be stated that there were seven medical colleges in Indiana at that time, two regular schools in Indianapolis and one at Fort Wayne, and the other four consisted of one physio-medical college, two eclectic and one so-called American Medical College which claimed to teach regular medicine, homeopathy, eclecticism or any other hobby the student might select. All the schools were supported by the students' fees, and in some instances by contributions of members of the faculties. The regular schools were voluntarily beginning to comply with the educational requirements of the American Medical College Association.

For more than half a century, repeated efforts had been made to secure enactment of a law based upon educational qualifications as a condition of license. However, the conflict between the irregular schools and the Indiana State Medical Association was very active in those days.

In 1896 Dr. James H. Ford was elected president of the Indiana State Medical Association. He asked the writer to act as chairman of the Committee on Legislation and Public Policy. It was explained to him by the writer that it would be futile to try to get an adequate law passed that did not have the cooperation of the so-called irregulars, and that acceptance of the chairmanship of this committee by the writer would depend upon his approval of seeking the cooperation of other schools. He replied, "You may have a free hand if you will accept the position, and you may select the other members of your committee." In consequence the writer immediately called a conference at his office of the chairmen of the legislative committees of the Homeopathic, Eclectic and Physio-Medical schools. They were greatly pleased to think they were recognized. It was suggested to them that there should be no difference of opinion on the educational requirements of the law and that it should require a high standard, but that the

examination in materia medica and therapeutics of applicants for license should be made by a representative on a proposed state board of examiners who was of the same medical school as the applicant. It was proposed to give each of the three schools mentioned a membership on the board. The original board had one homeopath, one eclectic, one physio-med, and two members of the regular profession. By the mutual agreement referred to, the opposition of the irregular schools was eliminated, and the chief objectors to the proposed new medical laws were quacks of all sorts, the patent medicine men, some of the wholesale druggists and a few of the members of the Indiana State Medical Association who thought the law too liberal in including the irregulars.

In formulating the law, each member of the joint committee of the different schools was asked to participate and various suggestions were made, and this ultimately resulted in the request of the committee for the writer to formulate a suitable act. This required considerable labor and frequent meetings of the committee were held. The law prepared by the writer and finally agreed upon was based in part on the then recently enacted laws of West Virginia and Ohio, with additions and adaptations to Indiana. The basic feature of the law was the establishment of an educational standard, and it was provided that the board, when organized, and thereafter, should annually publish a minimum standard of educational requirements. This proved to be a question of great importance, and after some discussion, the board, after organization, invited the writer to confer with them in reference to it. Endeavor was made to obtain the views of the individual members of the newly organized board, and then it was suggested that in view of the fact that there was no conflict on the question of therapeutics and materia medica, it would be wise for the board to adopt the standard of the American Medical College Association. This was accepted as solving the question, and the standard of the American Medical College Association was approved. In 1905 an amendment added an osteopath to the board. Forty of them were licensed the first year under the exemption clause. The following year when an examination was required, but two were licensed, and a correspondingly small number since. With the basic educational requirements broadly enforced, the law in itself has done much to elevate the standard of medical education in Indiana and to require sectarianism to meet the educational requirements.

As above mentioned, there were seven medical colleges in Indiana at the time the law was passed and all were so-called proprietary schools without endowment or state support. At present we have but one medical school in Indiana, and it is a department of Indiana University and is financially supported by the state. Medical school antagonism has disappeared and there has been established a

great medical center around the Medical School, including the newly erected Dental School, the Long, the Riley, the Coleman hospitals and the Indianapolis City Hospital, in close relation to each other and with adequate grounds for future development.

In addition, the strength of sectarian medicine has been gradually diminished and its influence is trivial compared with the force it once exerted.

It must not be inferred that the law of 1897 was passed exactly as originally written. Organized opposition to it was very strong but was largely from commercial sources and a group of "electromagnetic" and other quacks, and the very small group referred to of respectable physicians who thought the law too liberal. After the law was passed a member of the faculty of the medical school, in which the writer was then a teacher, made objection that the law had created a board of five members with three of them irregulars, and had empowered them to establish an educational standard and had also authorized them to inspect medical colleges. The objector said, "These irregulars are authorized to come and inspect our school buildings, our laboratories and other teaching facilities and to pass on educational requirements." The writer replied, "They are also required to do the same thing for all other schools, and I think we can stand an inspection better than they." He smilingly replied, "Perhaps that is so."

In the passage of the law, amendments were forced through by its opponents that were objectionable but they failed to impair the underlying flexible educational features of the act. The correction of those defects depends upon the united understanding and continuing efforts of the medical profession.

Generally speaking, we have today a much more sympathetic attitude toward higher medical standards by the public. We are indebted in no small degree to the advance in general education, and to better appreciation of more thorough training in any profession. Pre-medical requirements are legally defined. The four-year course of nine months each in medical school is in striking contrast with the former medical college requirements, including two courses of lectures of four or five months each, particularly so when it is recalled that in the early days the second course was simply a repetition of the first.

While earnest men would have done their best to advance medical education, the present status would have been impossible without a legalized definition of what constitutes a medical school. This is supplemented by a State Board examination, and the State Board is required to keep in touch with advances in medical science and to base examinations on current knowledge of the healing art. From this there follows a better appreciation of the influence of medical legislation upon medical education.

1711 North Capitol Ave.

HOTELS AND RATES IN INDIANAPOLIS FOR THE ANNUAL SESSION OF THE INDIANA STATE MEDICAL ASSOCIATION, OCTOBER 9-11, 1934

Name and Location	Number of rooms	Rates
ANTLERS 750 N. Meridian St.	250, all with bath	Single, \$2.00 to \$3.50 Double, \$3.50 to \$6.00
CLAYPOOL Wash. and Illinois Sts.	600, all but a few with bath	Single, \$2.00 to \$6.00 Double, \$4.00 to \$8.00
ENGLISH Monument Circle	250, 150 with bath	Single, \$1.00 to \$3.00 Double, \$2.00 to \$4.00
HARRISON 51 N. Capitol		Single, \$2.00 to \$4.00 Double, \$3.00 to \$6.00
LINCOLN 117 W. Washington St.	400, all with bath	Single, \$2.25 to \$6.00 Double, \$3.75 to \$8.00
LOCKERBIE 123 S. Illinois St.	225, all with bath	Single, \$2.00 to \$2.50 Double, \$3.00 to \$3.50
MAROTT 2625 N. Meridian St.	70 apts., accommodating 250	Twin beds, \$4.00 to \$4.50 Single, \$2.00 to \$4.50 Double, \$3.00 to \$6.00
SEVERIN 201 S. Illinois St.	400, all with bath	Single, \$2.00 to \$4.00 Double, \$3.50 to \$7.00
SPENCER 248 S. Illinois St.	200, 100 with bath	Single, \$1.25 to \$1.75 Double, \$2.25 to \$2.75
SPINK-ARMS 410 N. Meridian St.	400, all with bath	Single, \$2.50 to \$5.00 Double, \$4.00 to \$8.00
WASHINGTON 34 E. Washington St.	300, most of them with bath	Single, \$1.50 to \$4.00 Double, \$3.50 to \$5.50

ROUTES TO INDIANAPOLIS

Highways—Indianapolis is ideally located from the standpoint of state transportation, and is on the following national highways:

- No. 52—Northwest and southeast
- No. 40—East and west
- No. 31—North and south
- No. 3—West

Railroads—Indianapolis is served by the following railroads: Direct service on the Pennsylvania, Big Four, Monon, Baltimore and Ohio.

INDIANA STATE DIVISION OF PUBLIC HEALTH

BUREAU OF COMMUNICABLE DISEASES

Monthly Report, July, 1934

Diseases	July 1934	June 1934	May 1934	July 1933	July 1932
Tuberculosis .....	168	197	150	107	177
Chickenpox .....	18	80	183	24	58
Measles .....	212	2,083	5,036	84	86
Scarlet Fever .....	103	233	461	81	115
Smallpox .....	0	6	8	1	15
Typhoid Fever .....	55	34	21	59	102
Whooping Cough .....	225	265	266	203	335
Diphtheria .....	33	40	48	46	76
Influenza .....	21	30	56	49	58
Pneumonia .....	10	18	16	2	15
Mumps .....	5	13	53	7	91
Poliomyelitis .....	2	1	4	1	4
Meningitis .....	0	3	3	8	22



# THE JOURNAL

OF THE

## INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL  
PROFESSION OF INDIANA

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SEPTEMBER, 1934

### EDITORIALS

#### MEDICAL CONTROL OF TUBERCULOSIS WORK

It is doubtful if there is any phase of medical practice which has so completely gotten out of control of the medical profession as has tuberculosis. There are probably twenty thousand laymen in Indiana who—in their own minds—know more about tuberculosis than does any doctor in the state.

Within a month, for example, we have had a woman tell us that very few doctors understand this subject. She went on to tell us about marvelous discoveries that had been made recently. After asking her a few questions, we found that she regarded the article by Paul DeKruif, written for a prominent woman's magazine some months ago, as the last word on the subject. We are also reminded that when several years ago the Governor of Indiana appointed a commission to study the tuberculosis situation in Indiana, he did not put a single physician on that commission. Furthermore, when the final report was published, no mention was made of physicians, except a couple who were superintendents of tuberculosis institutions in the eastern states. The absurdity of such a situation needs hardly to be emphasized.

The medical profession may well be grateful to the Tuberculosis Association for the fine work which it has done in the last few years. It has helped very materially in the campaign against tuberculosis, and the lower death rate of recent years is in part due to this work. In a sense it is not the fault of the Tuberculosis Association that it has come very largely into lay control. In a large measure this is due to the fact that physicians have permitted this phase of medicine to slip through their fingers, and gradually have allowed

it to come into the hands of persons who are earnest and zealous, but not always well informed in the finer points of diagnosis and treatment. The time has come when the medical profession must take steps to regain control of what is essentially a medical problem.

Tuberculosis has gradually gone downward and is now already at a level which would have been believed Utopian only a few years ago. Now is the time to strike in order to take it to lower levels. The public is much interested in diseases, and genuine progress can be made, provided the program is made out intelligently and in accord with the best medical thought. The past four years have been trying ones for many families and many individuals who are living on the brink of economic disaster.

Unless intelligent and scientifically correct measures are taken, we may confidently expect tuberculosis to increase in the next few years. Already in many states, some of them adjoining Indiana, the death rate from tuberculosis has started upward. This is a crucial time in the campaign, and we cannot afford to make mistakes. We as a profession should be tremendously grateful to the laymen who have done such splendid work in tuberculosis prevention, but we must insist that leadership come from the medical profession. Personally, we are of the opinion that when that leadership presents itself, the laymen and the lay organizations will be only too glad to fall in behind.

Recently great progress has been made in Indiana toward bringing work of a public health nature back to the medical profession. Now is the time to act in order that tuberculosis may again return to the home port. It is so easy for some zealous but uninformed layman to make a mistake that we must insist that there be expert medical opinion on every adventure in the realm of tuberculosis eradication. This disease is a medical problem; it must therefore be under the direction of those trained in medicine.

#### INVESTING BLINDLY

At numerous times THE JOURNAL has commented on the matter of investments on the part of our members; we have brought to their attention some of the most notorious swindling rackets of the times; we have directed specific attention to frauds that are so palpable that the veriest tyro should see through them; yet, with all our preachments, with all that the public press has had to say on the subject, it seems that physicians continue to be easy marks for the promoters, stock manipulators and what-not. The Indianapolis newspapers have recently been full of stories regarding the closing of an outfit known as Mann and Company, an alleged "bucket shop." Our further information is to the effect that numerous Indiana physicians have been "customers" of this institution and have, therefore, suffered financial losses.

We might again preach a sermon on the subject of unwise investments, using as our theme the slogan of the Indianapolis Better Business Bureau, "Investigate Before You Invest." However, we will not take advantage of the occasion except again to direct the attention of our readers to the fact that the Association headquarters stands ready at all times to make investigations of this sort for our members; our Mr. Hendricks is in close association with the Indianapolis Better Business Bureau and through that agency he will be able to check up on any situation of this sort that may be referred to him.

There remain, however, some other considerations which we feel should not be passed over lightly. From a recent article in the Indianapolis *Star* it would seem that the State of Indiana, through its office of Securities Commissioner, is not wholly without blame for the debacle of Mann and Company. In fact, the *Star* story should make it mighty uncomfortable for those directly concerned with the management of this department. Toner Overley, for quite some time the able and highly efficient secretary-manager of the Indianapolis Better Business Bureau, makes some very broad statements regarding the failure of the Indiana department to make a proper investigation of Mann and Company. Apparently, the commissioner had made a statement that there was little he could do in the matter, *after* Mann and Company had secured a license to operate in Indiana. Mr. Overley, in the *Star* article, makes it very plain that there was plenty that the commissioner could do and that had he functioned according to law as well as according to the suggestions made to him, Mann and Company would have made a very short stay within our state. It is perfectly inane even to imagine the existence of an Indiana law that licenses a profession or business without some recourse in the event said profession or business is improperly and illegally managed. The Indiana Securities Act does provide for licensure; at the same time it provides for revocation of this license; hence we see no proper alibi for the commissioner in this regard.

Further, Mr. Overley explains that he wrote to the commissioner, asked for appointments via the telephone, all of which was disregarded; that he wrote Governor McNutt about the matter, but received no reply nor even an acknowledgement of the letter. Now that an investigation is being made via court procedure, the whole sorry tale comes out, and its unfolding brings to mind many questions that we deem most pertinent.

First, just what is the value of the Indiana Securities Act to the investing population of Indiana if its commissioner does not properly enforce the legal provisions thereof; and again, why should not a representative of such a valuable organization as the Indianapolis Better Business Bureau be accorded at least the common business decency of an answer to his letters, telephone calls, etc.?

Finally, Governor McNutt, when appealed to after other methods had failed, should at least have made reply to the letter from Toner Overley; we believe it the right and the duty of the Governor of Indiana to see that his department heads carry on in the most business-like manner possible. Several hundred thousand dollars belonging to Indiana citizens seems to have disappeared and the disappearance seems justly chargeable to what amounts to gross neglect, at least.

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#### SYNTHESIS OF VITAMIN C IN THE HUMAN INFANT

Along with the growing interest in endocrine glands, chemists began to isolate and produce in pure form the active principles of these glands. It is to be expected that the chemists will find and give to us in pure form the active principles of the more or less mysterious substances now called vitamins.

Vitamin C<sup>1</sup> has now been identified as hexuronic or ascorbic acid and chemists have produced it in pure form obtainable for experimental purposes. Crystalline active antirachitic substances have been produced and also crystalline preparations of vitamin B have been produced from yeast.

Quantitative tests, the Bezssonoff reagent and the dichlorophenol-indophenol, have been devised to measure the amount of vitamin C in solutions. Rohmer, Sanders and Bezssonoff<sup>2</sup> of the medical faculty of the University of Strasbourg have used these reagents to test the urine of infants between two and twenty-three months of age who were on a diet free of vitamin C. It was found that infants up to five months evidently produced their own vitamin C as it could be found regularly in their urine. This function was gradually lost after the fifth month and disappeared in infants of fourteen months or over. It was found that in sick and dystrophic infants the excretion of vitamin C in the urine ceased.

The suprarenal gland has been found to contain large amounts of hexuronic acid. When scurvy develops, these glands become markedly depleted in this vitamin. It is known that species like the bird, rat and dog do not develop scurvy. In these scurvy-free species it is very difficult to deplete the suprarenals of vitamin C. These animals must therefore make their needed vitamin C with ease or be able to store it in unusually large quantities in the suprarenal glands.

A like condition must exist in the infant up to the fifth month. There is much of interest yet to be learned about the production of vitamin C and its relation to the suprarenal cortex.

<sup>1</sup> Recent Studies of Vitamin C: *Jour. A. M. A.*, 101:6 (Aug. 5), 1933.

<sup>2</sup> Rohmer, P., Sanders, U., Bezssonoff, N.: Synthesis of Vitamin C by the Infant, *Nature*, 134:3378 (July 28), 1934.



## LEGAL REGULATION OF THE PROFESSION

It is generally agreed that the state has the absolute right to exercise some degree of control over the various professions practiced therein; seldom, indeed, do we of the present day hear that right being challenged. With that right, however, should come an enforcement of the regulations provided. In many of our states there is no cause for complaint on that score, but in a few states the law does not properly cover the conditions existing. For some reason or other Law and Medicine seem to hold the front stage position when such matters are under consideration. Only recently have two of our states, Massachusetts and Missouri, made radical changes in their laws regulating the legal profession. In the latter state it appears that the Supreme Court will have much to say in this regard, while in Massachusetts the Supreme Court has already taken drastic action. The *New England Journal of Medicine*, July 26th issue, compliments the legal profession on this forward step, but laments the fact that Medicine must, for the time being, continue with its somewhat archaic regulations.

In concluding his article the editor says: "Massachusetts has become a laughing stock among the states for its medical practice act. The legislature will change the law as soon as public opinion demands it. It is the duty of every physician to enlighten public opinion and to stimulate it to action. The health of the people of the commonwealth is at stake."

To our mind the whole meat in the cocoanut is the statement that "The legislature will change the law as soon as public opinion demands it." Public opinion can and does bring about action; it will bring about the enactment or repeal of a law; it will bring about the enforcement or the utter disregard of a law. We long have preached that if we are to get anywhere in our fight for individualism in medicine we must first educate the public to the necessity of such a thing. We can, as a medical organization, put on our armor, tighten our belts and go forth to fight against state medicine, socialized medicine and what-not, but until we have with us that powerful ally, Public Opinion, we are making a valiant but losing fight.

The *Journal of the Missouri Medical Association* congratulates the state bar on the steps being taken to clean house and recalls the fact that the medical profession did the same thing a few years ago, when they had the able assistance of the *St. Louis Star* in their campaign. They were able to get rid of some of the most notorious diploma mills and second-rate schools in the country.

Massachusetts, on the other hand, while congratulating its bar, bemoans the fact that it must continue with its present medical practice act which does little credit to a state with an international reputation as the home of education and culture. Her licensing officials are required to recognize institutions whose graduates are barred from prac-

tically every state. Her requirements are far below that of other states, a thing that grates on the better element of the profession of the Bay State.

In passing, we may say that Indiana, even though she is operating under the basic law of 1897, needs bow her head before no other state as regards medical practice acts; it is true that we do need some changes in the law, but, even so, we are by no means behind other states in this regard.

## DROUTH PERILS

In common with most other sections of the country, Indiana is just now emerging from the greatest drouth in the memories of most of us, but with the late summer rains and those that may be expected during the fall months, it is probable that the worst has passed and that we may expect a more normal rainfall during the remaining months of the year. Even with that promise before us, it is quite important that we guard against a peril as great as was the drouth itself—a possible pollution of our domestic water supply. Streams and wells that never before have failed us have either been dry or so nearly approached that state as to cause great concern. Many communities have been hard put to it to find enough water for the bare necessities of life, and some of them have utilized sources that heretofore have been looked upon with some degree of suspicion.

It occurs to us that no little danger lies in the opening of wells that have been dry for most of the summer, unless there is a thorough cleansing and a close check-up of the surroundings of those wells. The same potential danger exists in many communities which have depended upon our streams and lakes for their water supply; many of these bodies of water have been extremely low, which condition frequently forebodes trouble. Other communities, guided by the experiences of this summer, will be seeking new sources of supply, and it is extremely important that this matter should receive the most careful consideration.

Our Division of Public Health, our county and city health officers, and all those engaged in health work of any sort, would seem to have before them a most strenuous fall season if the proper study and consideration is given these matters. Nor is the onus entirely upon these officials, for every Hoosier physician owes it to himself and to his community to see to it that the utmost care is taken to insure an adequate, potable water supply.

In this connection it seems not amiss to speak of the gross pollution of our natural waters in Indiana. We have talked about this before, many times, but it occurs to us that now, more than ever before, should this matter have our undivided attention. Scarcely a day passes that we do not see numerous kiddies, as well as some grown-ups, with patent evidences of having been bathing in polluted waters. We are advised that no corner of the state is excepted; the condition exists throughout Indiana.

Much of the lower end of Lake Michigan can be regarded as little more than a large cesspool and for months we have advised our patients against entering this water. One of our communities is just now completing a sewage disposal plant which is expected to remedy the evil of discharging raw sewage into the lake, but it is the expressed opinion of those who should know what they are talking about that if there were no more sewage and industrial waste discharged into Lake Michigan from and after this date, it would be a matter of many years before the water could be classed as fit for human consumption.

We know something about the prodigious tasks confronting our Division of Public Health; we know quite a bit as to the work they are now doing and the plans they have for the future, but we do urge that water pollution be stopped, that our streams and lakes, than which few states have a more bountiful supply, be restored to their natural condition and returned, unsullied, to the people of Indiana to whom they rightfully belong.

### EDITORIAL NOTES

ALL delegates to the annual session are urged to study the report of the Special Committee on Revision and Codification of the Constitution and By-Laws, on page 413 of this issue.

#### WARNING!

A young man calling himself James Cooper, and representing himself as being the son of an Indianapolis physician, is soliciting subscriptions for A. M. A. publications and collecting money for them fraudulently. He is not an authorized representative, and physicians are warned against paying any money to him.

THE Governor of Massachusetts is to be congratulated on his veto of a bill which would have empowered the "University of Massachusetts, Incorporated," to grant the degree of Bachelor of Science. In his comment he calls attention to the fact that this privilege is asked in order that the University of Massachusetts, Incorporated, may set up a course of study in accordance with the recognized educational standards for the degree! This is putting the cart before the horse in great fashion, yet it seems that the bill had little or no trouble getting through the legislature.

IN HIS recent address at Rochester, Minnesota, President Roosevelt, in a tribute to the Mayo brothers, naturally devoted his time to a consideration of the science of medicine. He recalled the fact

that the past fifty years have covered the most remarkable period in the history of science, and that the same period has brought forth the greatest advances in medical and surgical science. We hope that every physician read this most interesting speech; we cannot conceive how any official, no matter what his status, could give forth such views on scientific medicine and at the same time harbor the remotest idea of governmental interference with the practice of the healing arts.

Your Committee on State Fair has arranged a demonstration which will be carried out in the Good Health Building on the Fair grounds during the time of the State Fair, September first to seventh. Last year much interest was displayed in the blood pressure tests. This year's visitors will have the privilege of being checked for color blindness. If you visit the State Fair, do not leave until you have seen the exhibits and demonstrations in the Good Health Building.

WE ARE sure we are correct in our statement that the attendance at the Indianapolis session next month will eclipse that of any year in the history of the Association. In order to save unnecessary delay in registering at your favorite hotel, we would suggest that you make reservations immediately. Information at hand indicates that we will have an unusual number of guests from neighboring states, all of which is an added reason for assuring yourself of accommodations during the meeting. Read pages 402 and 403. Hotels are listed on page 394.

"BITE by a Snake in a Bunch of Bananas" is the heading of a report of snake-bite in the August eleventh issue of *The Journal of the American Medical Association*. Dr. Fernan-Nunez, of Milwaukee, reports the case and states that this is the fifth occasion reported to him of the finding of a snake in a bunch of bananas. The snake has been identified as of the viper family and is said to be very poisonous. Some months ago, a local fruit dealer got the scare of his life when, in pulling bananas, he took a firm hold on a short, thick snake. The snake was immediately killed and no effort was made to identify it. In the Milwaukee case, treatment consisted of using a tourniquet, opening the wound, applying suction by mouth, and administering anti-snake-bite serum. After a period of six hours the patient seemingly had recovered.

A FEW months ago we commented upon professional anesthetists of the non-medical variety, following a pronouncement of our Board of Medical Registration and Examination to the effect that



such procedures were illegal, inasmuch as the administration of anesthetics is a part and parcel of the healing art and, as such, should be limited to licensed physicians. Now we note the official opinion given by the Attorney-General for Indiana, in which he makes it clear that the administration of anesthetics by nurses and others, as now practiced in many of our hospitals, is not in accord with Indiana medical law. The *New York State Journal of Medicine*, in its issue of August first, editorializes upon the subject and states that such practices in New York State are without the pale of the law and should be stopped. We again suggest that in those communities where there are no full-time anesthetists, there is opportunity for younger men to enter a specialty that will afford comfortable incomes.

EDITOR WHALEN, of the *Illinois Medical Journal*, attacks the action of the Michigan State Medical Society House of Delegates because of its adoption of the plan of "Mutual Health Service" of the "voluntary" type. Dr. Whalen is at his best in this rather extensive portrayal of a new plan to take care of families with incomes in the so-called lower brackets. He takes strong exception to the fact that one of the investigators, recently sent to England to investigate the plan in effect there, was Nathan Sinai, a man who was intimately connected with the Committee on the Costs of Medical Care. We shall have to admit that we are quite in accord with Editor Whalen in this regard; we cannot for the life of us see what good will come from such a plan, and just why a progressive state such as Michigan always has been should enter into such an arrangement is quite beyond us. We await with much interest the coming annual meeting of the Michigan State Medical Society, for we have reason to believe that there will be fur-a-flyin' in plenty.

THE August number of *Southern Medicine and Surgery* gives a new slant on an old subject, that of professional attention to members of Congress and their families. Much complaint has been registered recently concerning the habit of many of these folks entering government hospitals and there receiving free treatment. According to the article mentioned, a North Carolina congressman was a patient in a Washington private hospital for a considerable period of time; his total bill amounted to the rather sizable sum of \$4,570, part of which apparently had been paid. The hospital brought suit to collect the balance and the law-maker at once instituted a counter suit for the sum of \$35,000. He based his claim for damages on the allegation that the suit filed against him resulted in his being defeated for renomination. We, of course, know little or nothing as regards the exact merits of the controversy, our interest being aroused by the fact that the solon went to

a private hospital rather than to a government institution and the fact that his counter suit is based on unusual allegations.

DR. FREDERICK C. WARNSHUIS, secretary of the Michigan State Medical Society and Speaker of the House of Delegates of the American Medical Association, is leaving Michigan, September fifteenth, to become secretary-treasurer of the California State Medical Association, assuming his new duties on October first. As Speaker of the A. M. A. House of Delegates, as well as in his various capacities in connection with the Michigan State Medical Society, Dr. Warnshuis has become well acquainted with thousands of American physicians; he has done a prodigious amount of work for organized medicine and has done it exceptionally well. We are sure we bespeak the sentiments of the Indiana profession when we say that we are more than sorry to see Fred Warnshuis desert the Central States, even though his leaving is in the nature of a promotion; we had come to look upon him as one of our staunchest friends and will of course miss the many contacts we have had with him in the past. THE JOURNAL joins with his hosts of friends in wishing him every success in his new field and at the same time congratulates the profession of California for having made such a valuable addition to its membership. To carry on in Michigan, Dr. Burton R. Corbus has been named as acting secretary of the Michigan State Medical Society.

ALONG in July the press carried a story regarding the discovery of a toxoid that had produced immunity in 82 per cent of 1,100 cases, that this discovery came through the Public Health Service and that the treatment was based on a patent issued to Drs. George and Gladys Dick, some time ago. The story went on to complain that the Dicks refused to give this discovery to science, or rather that Dr. Gladys Dick had refused to agree with her husband, Dr. George Dick, on this plan. The story aroused several physicians over the country to the point that they made somewhat heated denials that the Dicks were in any wise mercenary in the matter, hence further investigation was made by the press. They found, as a matter of course, that they were too hasty in their statements regarding the attitude of the Dicks. As is generally known, the findings of this couple were patented, the patent having been obtained in order more effectively to control the manufacture and distribution of the toxoid. This was no new procedure, since insulin and viosterol were both protected in the same manner, much to the better interests of the public. We like the activity of the daily press in reporting news matter concerning the profession but we do wish more care might be used in checking the authenticity of data before publishing material of great importance.

BY WAY of showing what the lay press thinks of the ruling concerning administration of anesthetics, we quote the following from the August 4, 1934, issue of the Fort Wayne *News-Sentinel*:

*Anesthetic Ruling Aids Some Doctors, Hurts Others Here.*—Physicians and nurses in Fort Wayne as well as hundreds of others throughout the state will be affected by a ruling of Attorney-General Philip Lutz, Jr., that only licensed physicians may administer anesthetics, representatives of the Allen County Medical Society said today. Lutz's ruling was made Friday, and an opinion sent to the State Board of Medical Registration and Examination of Nurses. The opinion will prove beneficial to some physicians and nurses, but will be unfavorable to others.

There had been agitation over the country for some time against the practice of nurses serving as anesthetists because, physicians claimed, the giving of an anesthetic is legally the function only of a practicing physician, according to the terms of law. Physicians contended that work lawfully theirs should not be given away to someone not entitled to it.

Non-observance of the regulation opened the way for physicians to hire competent nurses for office duty who could also serve as anesthetists. With a large number of anesthetic administrations in a week, a physician could pocket the fees while paying the office girl her regular weekly salary. This took the work away from physicians who studied to practice as anesthetists, medical society members pointed out.

IN A recent editorial we spoke about the venereal disease control activities conducted by the Indiana Division of Public Health. Physicians can now comply with the requirements of the Division of Public Health for free neo and sulph-arsphenamine for the treatment of indigent infectious syphilitic patients. They can procure requisition blanks by communicating with the Indiana Division of Public Health, State House Annex, Indianapolis, Indiana. Six ampules of arsphenamine will be supplied for each individual patient. Additional requisitions will be accepted in the event that patients are still infectious or a menace to public health. The state does not pay for the administration of these treatments. The expense involved for medical service must be defrayed by the local community or the city, county or town where the indigent patient resides. This program of the Division of Public Health for the distribution of neo and sulph-arsephenamine is a step forward. By seeking the support of the organized medical profession it is relevant to the policies for which we stand. Physicians have been most generous since this plan has been outlined. On numerous occasions they have given medical service without remuneration. This only goes to prove that the physicians of the state

are sincerely interested in relieving the suffering and miseries caused by these diseases. The officials of the Division of Public Health have announced that they greatly appreciate this additional cooperation. Their venereal disease control movement seems to have reached the point of highest effectiveness.

THE preparation of articles submitted to medical journals has received no little consideration in past months in contemporary journals. Comments have related not only to subject matter, but to format as well. In the June issue of the *Nebraska State Medical Journal*, under the title, "Long Articles and Long Bibliographies," appears an editorial which we quote:

"Medical editors are not fond of lengthy articles. They realize that they occupy a disproportionate amount of the available space in the magazine. Not only that, but, except for the very few bookworms who devour every word of an article, the long article is rarely read by the busy physician who likes short pithy articles. The author who aims to have his production read and appreciated will cultivate a habit of writing a terse, pointed article.

"Probably few medical editors are able to appreciate a lengthy bibliography. It is generally believed that lengthy bibliographies are 'faked'—that the author has not read or consulted the vast number of authorities he quotes, and this is particularly true of foreign authorities.

"A writer in the *Medical Record* of recent date says:

"I have read articles by physicians who would give a bibliography of literature in other languages, as though they had read the original, that I did not believe even knew a single word in the language of the original reference.

"All such bibliography should be put before my editorial blue pencil. I would save some space after I got through with it.

"I do not object to a brief essential bibliography, but I do object to every writer trying to give a world's bibliography on every subject he writes on when, as a rule, he has never seen five per cent of the bibliography he gives and could not read 50 per cent of the original articles if they were put up before him."

"The present economic stress makes it imperative that the medical editor conserve every available inch of space in his journal for matters that are more worthwhile for the average reader than bibliographies."

We especially commend that portion of the article relating to bibliographies; sometimes we have the notion that an exceptionally long list is used more for "show" than because the writer has made an unusually extensive research in the preparation of his paper.



## THE PRESIDENT'S PAGE

In a recent article over the signature of H. Sheridan Baketel, M. D., some statements are made which, although already known to us, are interestingly said and worth repeating. For instance, "Politics and state medicine are as inseparable as a dog and his shadow. One presupposes the other." In the words of the now-famous dissenting minority group, "There is nothing in experience to show that it (state medicine) is a workable scheme, or that it would not contain evils of its own which would be worse than those it is supposed to alleviate."

"Again to quote, 'Evils of its own' . . . and what greater evil than politics with its unlovely brood: graft, incompetence, stupidity, intimidation and suppression of individual enterprise?"

"Tax funds and state financial aid are suggested as a means of supporting a socialized régime in medicine. Medical committees to direct the work, it is also proposed, might be 'elected by popular vote like school boards, or appointed by municipal or county officials.' Thus politics rears its ugly head in state medicine from the very start. The evils in the situation are not intangible half-guessed-at possibilities. They can be definitely predicted and named. The names are not nice, of course. For when politics comes in at the door, common decency and honesty fly out the window."

"Try to imagine the possibilities under a medical super-bureaucracy demanding more from the taxpayer than does our present school system, or even the army and navy!

"Think of the lot of the ethical practitioner caught outside the political pale, and treated therefore as a quack. Think of the health of the public being dependent upon staying in the good graces of the ruling political boss.

"We have already enough of politics—enough and to spare. We have it in business, in our educational system, in public affairs and elsewhere. "Let's keep politics out of medicine."

Permit me to requote from an entirely different source—the *Indianapolis News* for June 30, 1934.

Just before the President left for his vacation, the following appeared as an Associated Press item:

"The committee will study the hazards of unemployment, old age and unemployability, industrial accidents and occupational diseases, non-industrial sickness and disability, widowhood, and the economic aspects of maternity."

The following comment accompanied the statement:

"It is the intention of the President to have this whole social program formulated for presentation to federal, state and local governments next year."

Upon his return to our shores he had the following to say of the Northwest: "Already peopled

by Americans who know whither America is bound—people who are thinking about advantages for mankind, good education, some play and above all a chance to live their own lives without wondering what is going to happen tomorrow, security for old age, security against the ills and accidents that come to people, above all security to earn your own living."

We do not believe that our President will seek to lower the standards of American medicine (which now leads the world) by any scheme of mass production. We are, however, fearful that there are those close to the administration who are not adverse to some more experimentation, even to the degree of applying it to the health of the American citizen. There are so-called philanthropic agencies outside the administration that are definitely planning such a scheme. The Ethiopian in each woodpile, as ever, is the trained paid social service worker, still trying to create more pay rolls, at the taxpayers' expense, into which he may fasten his tentacles.

As they broadcast their high-sounding, visionary phrases and impracticable promises of a life of ease, they very carefully refrain from saying to the public that this will be a great agent for the destruction of independence and self-respect among the American citizens.

They do not take the trouble to call the attention of the public to the inevitable control by politicians.

They have not said a word to the public about this added enormous cost to the taxpayers.

They have not yet told us what the taxpayer is to use for money.

They have not told the public that this will surely lower the quality of medical service, and that they may be regimented much as the hogs they have slain.

And, above all, they have not asked the public if they want any such thing as chain-store medicine.

There are 152,000 physicians in this country, trained to protect the health of the public from every angle, who have put American medicine at the peak of accomplishment, second to none.

Shall we sit idly by and let a few social service workers tear up a structure as dear to us as our own lives? I believe not. I believe that organized medicine has a voice, and it is imperative that this voice be heard.

Remember that we still have a United States Congress, and that this body is made up of men selected by our own patients. Our duty is plain. Let the members of Congress know in a dignified way what the public wants in the way of their health matters, both public and private.

*E. E. Padgett.*

## COME TO THE INDIANAPOLIS SESSION

OCTOBER 9, 10, 11, 1934

### GENERAL ENTERTAINMENT

#### GOLF TOURNAMENT!

Highland Golf and Country Club, 9:00 a. m., Tuesday, October ninth. Fees, \$2.00, including greens fees and luncheon.

#### TRAP SHOOTING TOURNAMENT!

Indianapolis Gun Club grounds, 2:00 p. m., Tuesday, October ninth. See coupon and other details on page 411.

#### STAG PARTY!

Buffet supper, smoker and stag party, at the Indianapolis Athletic Club, Tuesday evening, October ninth. Eats at 7:00 p. m.

#### LUNCHEONS!

Ex-service men, fraternity and class get-togethers will be held in the special dining rooms of the Claypool Hotel and clubs in Indianapolis Wednesday noon, October tenth.

#### OTHER ENTERTAINMENT

Other attractions in Indianapolis will be described in the complete program which will be published in the October issue of THE JOURNAL.

### LADIES' ENTERTAINMENT

#### FOSTER HALL

Visit to Foster Hall and program, Lilly Estate, at 2:30 p. m., Tuesday, October ninth.



FOSTER HALL

#### SUPPER BRIDGE

Buffet supper bridge party, at the Indianapolis Athletic Club, 7:00 p. m., Tuesday, October ninth.

#### AUXILIARY MEETING

Breakfast and annual business meeting of the Woman's Auxiliary in the Chateau Room, Claypool Hotel, at 8:30 a. m., Wednesday, October tenth.

#### STYLE SHOW AND TEA

Style show and tea for the ladies in the Auditorium of L. S. Ayres and Company, at 2:30 p. m., Wednesday, October tenth.

#### WOMEN PHYSICIANS

Dinner meeting for women physicians will be given Tuesday evening, October ninth, at 6:30, at the Propylaeum. (Speakers will be announced in the complete program in the October issue).

### ANNUAL BANQUET

RILEY ROOM, CLAYPOOL HOTEL

7:30 p. m., Wednesday, October tenth

**Speaker:** JAMES S. McLESTER, M. D., Birmingham, Alabama, President-elect, American Medical Association



INDIANA STATE MEDICAL ASSOCIATION

HEADQUARTERS—CLAYPOOL HOTEL

GUEST SPEAKERS

- DAVID WALLACE MACKENZIE, M. D., McGill  
University, Montreal, Canada
- ISIDOR S. RAVDIN, M. D., University of Pennsylvania,  
Philadelphia
- ROBERT A. STRONG, M. D., Tulane University, New  
Orleans
- EMIL NOVAK, M. D., University of Maryland, Baltimore
- JAMES S. McLESTER, M. D., Birmingham, Alabama, Presi-  
dent-elect, American Medical Association
- LUCIUS E. BURCH, M. D., Vanderbilt University,  
Nashville, Tennessee
- WALTER M. SIMPSON, M. D., Dayton, Ohio
- RALPH A. FENTON, M.D., University of Oregon, Portland,  
Oregon
- GEORGE R. MINOT, M. D., Harvard University, Boston
- SIR FREDRICK G. BANTING, M. D., University of  
Toronto, Canada
- FRANK H. LAHEY, M. D., Boston

\* \* \*

HOTELS AND RATES

ROUTES TO INDIANAPOLIS

COMPLETE information concerning hotels, rates and routes to Indianapolis is printed in this issue on page 394. Make your reservations now.

CONDENSED PROGRAM

TUESDAY, OCTOBER 9th

- Registration booth, scientific and commercial exhibits, mezzanine floor, Claypool Hotel.
- Golf tournament
- Council meeting
- Annual meeting of Child Health District Chairmen
- Trap Shooting tournament
- Meeting of House of Delegates
- Dinner for women physicians
- Buffet supper and stag party

WEDNESDAY, OCTOBER 10th

- Registration and exhibits
- General meeting
- Fraternity, class and ex-service men's luncheons
- Section meetings
- Annual banquet, Riley Room, Claypool Hotel

THURSDAY, OCTOBER 11th

- House of Delegates breakfast meeting
- Meeting of Council
- Registration and exhibits
- General meeting

\* \* \*

Complete program will be printed in the October issue

PLEASE MAIL THIS TO THE INDIANA STATE MEDICAL ASSOCIATION, 1021 HUME MANSUR BLDG., INDIANAPOLIS

Do you expect to attend the annual meeting of the Indiana State Medical Association? Yes No  
Accompanied by.....

Do you wish to enter the golf tournament? Yes No      The trap tournament? Yes No

Do you expect to attend the smoker? Yes No      The annual dinner? Yes No

Accompanied by.....for the dinner

When do you plan to arrive?      When do you plan to depart?

Name.....M. D.      City.....

Please favor us with a reply as early as possible so that the local committees may be aided in making your visit enjoyable.

## A PROTEST

Every Indiana member of the American College of Surgeons was given an opportunity to approve or disapprove the protest printed below. Out of 169 members, there were 104 replies. Ninety-eight of these replies approved the protest, four disapproved, and two expressed no opinion. The ninety-eight names printed below the protest are members of the College approving it.

To the Board of Regents,  
The American College of Surgeons,  
40 East Erie Street,  
Chicago, Illinois.

There has been continual complaint of the somewhat authoritative attitude assumed by the American College of Surgeons in speaking for the medical profession as a whole. There has also been considerable criticism of the dominance of a well-known group of leading members of the American College of Surgeons assuming to speak for the profession at large without more carefully obtaining the views of the profession, and without the same cooperation of the American Medical Association which should exist. The latter body is the only organization representing the entire profession which should give authoritative and considered expression of principles governing the practice of medicine as a whole.

It seems if the American College of Surgeons had any recommendations to make in regard to economic questions for the practice of medicine or any change in policy affecting the practice of medicine, they should be made in cooperation with the American College of Physicians and by mutual agreement presented as a recommendation to the House of Delegates of the American Medical Association as the only authoritative body of the medical profession.

With the foregoing statement is set forth the following beliefs concerning the position in the medical world that should be held by the American College of Surgeons. These principles also are attributable to all special societies or societies of specialists:

1. We believe the sole province of the American College of Surgeons is the improvement and education in diagnosis and technique of surgery, raising the standards of surgeons, and furthering the general field of the science of surgery. To these principles we are loyal.

2. We believe the American College of Surgeons has overstepped its bounds and assumed duties belonging to the American Medical Association, the only true representative of the great mass of physicians, and the only real democratic organization, speaking for not only the specialist, but the large mass of general practitioners, the latter of whom

will be most seriously affected by any changes in our present mode of practice.

3. We believe there is but one Association, the American Medical Association, efficiently and culturally representing the desires of the physician through its component county and state associations, which has any right to legislate on matters or promulgate theories or suggestions affecting so directly and seriously the practice of medicine in all of its branches.

4. Because of our above beliefs and because of the report of the Medical Service Committee, its adoption by the Board of Regents of the American College of Surgeons on June 10, 1934, and its publicity without reference to the House of Delegates of the American Medical Association to be assuming prerogatives not its right, we take this opportunity to express our disapproval of the actions of the College.

In consideration of the above statement of facts, we, the members of the American College of Surgeons of the State of Indiana, most heartily endorse the resolution presented by the Judicial Council of the American Medical Association and adopted by the House of Delegates at the Cleveland session of the American Medical Association, and individually voice our criticism of the Regents of the College of Surgeons for having taken action and assuming to speak for the medical profession.

In conclusion, we, the Indiana members of the College, appreciating the undemocratic type of organization of the American College of Surgeons, request a statement from the Regents of the College of their position for the future in the above discussed matters.

O. O. Alexander	F. E. Hagie	E. B. Mumford
A. C. Arnett	H. G. Hamer	C. A. Nafe
M. A. Austin	A. M. Hayden	E. O. Nay
J. F. Barnhill	H. W. Helmen	R. W. S. Owen
H. F. Beckman	J. W. Hofmann	E. E. Padgett
K. M. Beierlein	J. E. P. Holland	H. O. Pantzer
D. A. Bickel	G. F. Holland	J. W. Phares
G. F. Bicknell	B. M. Hutchings	H. C. Ragsdale
R. N. Bills	C. C. Hyde	Ernest Rupel
H. L. Brooks	R. G. Ikins	L. K. Ryan
E. L. Bulson	G. B. Jackson	G. D. Scott
J. W. Carmack	A. S. Jaeger	E. M. Shanklin
J. V. Cassady	F. H. Jett	P. G. Skillern
E. D. Clark	N. E. Jobes	O. R. Spigler
S. A. Clark	E. S. Jones	A. J. Sparks
G. A. Collett	D. O. Kearby	W. E. Stewart
J. A. Craig	Bleeker Knapp	F. B. Thompson
F. S. Crockett	K. M. Koons	J. H. Thompson
W. N. Culmer	W. C. Kunkler	W. S. Tomlin
W. R. Davidson	B. J. Larkin	H. A. VanOsdol
F. R. Doll	H. S. Leonard	F. C. Walker
C. A. Dresch	C. J. Littell	J. H. Weinstein
Rudolph Duenweg	C. L. Luckett	J. Y. Welborn
J. H. Eberwein	Pierce MacKenzie	H. H. Wheeler
S. R. Edwards	C. H. McCaskey	W. H. Williams
L. A. Elliott	A. C. McDonald	J. H. Willis
L. A. Ensminger	W. E. McCool	G. H. Wisener
C. E. Ferguson	C. O. McCormick	W. N. Wishard
N. H. Forster	E. L. Mattox	J. W. Wright
V. A. Funk	A. M. Mendenhall	M. D. Wygant
W. P. Garshwiler	F. W. Merritt	C. W. Yarrington
W. D. Gatch	Ira Miltimore	*S. J. Young
A. B. Graham	W. C. Moore	

\* Approved paragraph 3.



DISTRIBUTION OF AUTHORS

To the Editor:

Some time ago you expressed a desire to know the distribution of authors of original articles in THE JOURNAL of the Indiana State Medical Association by counties and districts from 1908 to 1933,

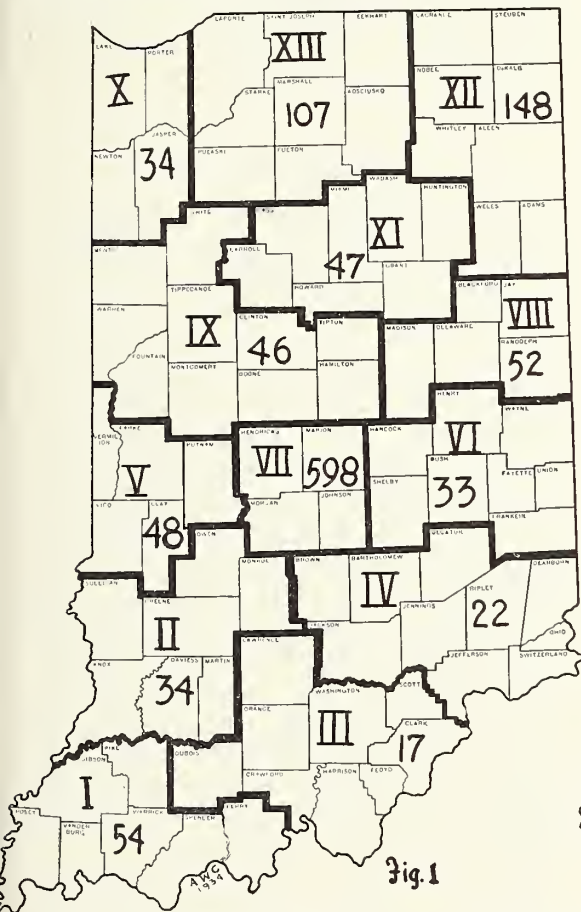


Fig. 1. Shows number of contributors to this JOURNAL from each Councilor District from 1908 to 1933, inclusive, in Arabic notation. Roman numerals indicate different districts. In case of collaboration, only one author is represented on map.

inclusive. This has been inquired into and the data have been transferred to the maps presented herewith. While the population, medically speaking, of each county is shown in figure two, the membership in the districts is not shown, but can be easily arrived at by simple addition, using figure two for the data.

The chief interest in figure two will probably be felt locally when readers from particular counties begin to compare figures with other localities. Possibly of more general interest is the following compilation, taken from figure two, but applied to figure one: It will be seen that there are twenty-eight stars in figure two, indicating that number of counties from which there have been no contribu-

tions of original articles to THE JOURNAL during the twenty-six-year period. If these counties are grouped by districts, the list is as follows:

- First District—Pike, Posey, Warrick, Spencer, Perry.
- Second District—Martin, Owen.

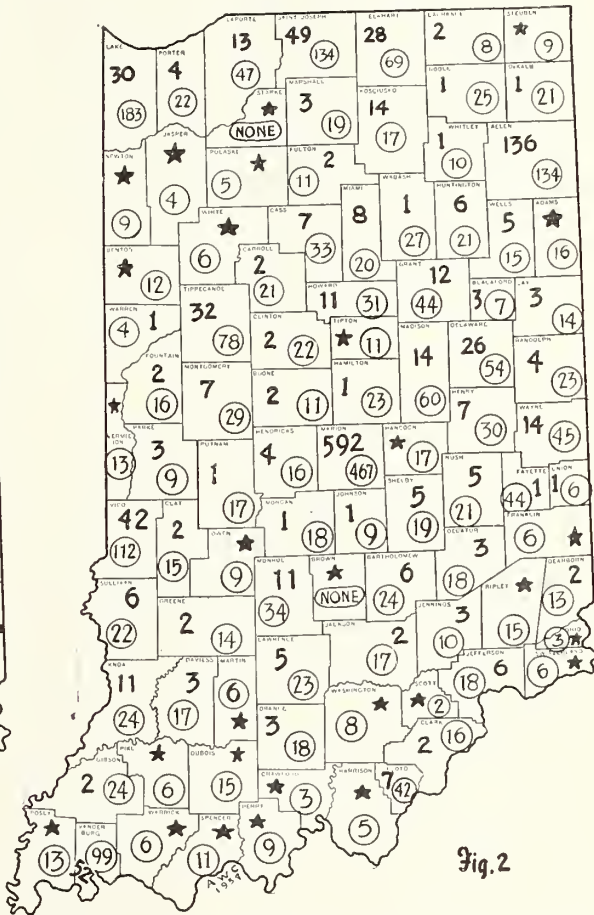


Fig. 2. Shows number of contributors to this JOURNAL from each county from 1908 to 1933, inclusive. The notations in circles give the number of members of the Indiana State Medical Association in each county as of December 31, 1933. In case of collaboration, only one author is represented on the map. A star indicates that there have been no contributors to this JOURNAL.

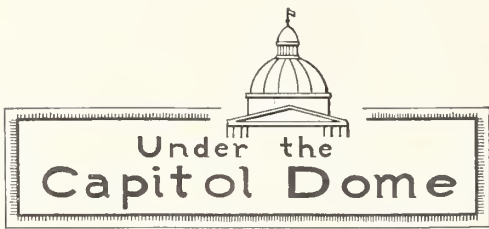
- Third District—Dubois, Crawford, Harrison, Washington, Scott.
- Fourth District—Brown, Switzerland, Ripley, Ohio.
- Fifth District—Vermillion.
- Sixth District—Franklin, Hancock.
- Seventh District—None.
- Eighth District—None.
- Ninth District—Benton, White, Tipton.
- Tenth District—Newton, Jasper.
- Eleventh District—None.
- Twelfth District—Steuben, Adams.
- Thirteenth District—Starke, Pulaski.

Even with allowance made for Starke and Brown counties there remain twenty-six showing no con-

tributions for as many years. While in many instances the starred counties have a small membership, nevertheless they have had over a quarter of a century at their disposal. It is not in a spirit of censure that these figures are displayed, but rather a lamentation that these counties have not been heard from, for surely there are physicians in each locality who make observations which would be of value to fellow practitioners, and we may assume that shyness, indifference or disinclination have interfered.

It is worth while to note that there were 1,240 articles by Indiana authors, with 56 collaborators (not shown on the maps), and in addition there were 175 articles by men outside the state, with five collaborators.

Respectfully submitted,  
A. W. CAVINS, M. D., *Statistician.*



The following temporary permits have been issued by the Indiana State Board of Medical Registration and Examination, and will expire on the dates which appear opposite their names:

Willis L. Pugh.....	11/24/34
Julia L. Adams.....	12/21/34
William B. Adams.....	12/21/34
Houston W. Shaw.....	12/22/34
Glen Van Ryan.....	12/26/34
John C. Drake.....	1/15/35
Emory L. Shiflett.....	1/22/35

The following permanent certificates have been issued:

Richard L. Smith, Certificate No. 12406..	7/18/34
Bruce A. Work, Certificate No. 12407....	7/20/34
Vernon B. Beam, Certificate No. 12408....	7/28/34

INDIANA A PART OF U. S. P. H. SERVICE  
MORBIDITY REPORTING AREA

Indiana has just been made a part of the United States public health service morbidity reporting area in recognition of the work of the Indiana Division of Public Health in compiling weekly reports of communicable diseases. Only those states that have a complete and reliable record of communicable diseases are included in this reporting area. Word that the public health service has included Indiana in the area has been received by Dr. Verne K. Harvey, director of the department of public health, from the United States Surgeon General, Dr. Hugh S. Cumming.

Dr. Thurman B. Rice, collaborating epidemiologist of the state health division, is in charge of collecting the weekly reports from more than 450 county, city, and town health officers and compiling them into useful form. The weekly reports are distributed throughout the state and the information also is forwarded to the U. S. public health service in Washington.

Data takes into consideration the number of cases of tuberculosis, chickenpox, measles, scarlet fever, typhoid fever, whooping cough, diphtheria, influenza, pneumonia, and poliomyelitis, and reported cases of social diseases.

\* \* \*

ADMINISTRATION OF ANESTHETICS

Registered nurses cannot legally serve as anesthetists, according to an opinion issued during the past month by Philip Lutz, Jr., attorney general, to the state board of medical registration and examination.

"An anesthetic is an agent that produces insensibility to pain," the attorney general wrote. "It is general knowledge that an anesthetist, in rendering a person insensible to pain must, in the administering of this agent, continuously diagnose and keep a careful watch and supervision over the amount of the agent that is to be administered. That is, an insufficient amount of the agent does not produce insensibility to pain, or an over amount is liable to produce death. It is further observed, as a general proposition, that the duties of the operator, in performing this operation, are so exacting in their nature, that the operator has no time or opportunity to cease his duties and diagnose the physical condition of the subject upon whom the operation is being performed, as to the condition of insensibility to pain, etc. In other words, it is impossible for the surgeon to perform his operation and also to assist in any way in the administering of an anesthetic."

"It follows," the attorney general concluded, "from the above that in our opinion, the administering of an anesthetic is a duty to be performed by a licensed physician only."

\* \* \*

INDIANA TO BE "FISHERMAN'S PARADISE"

Members of the medical profession who enjoy fishing will be interested in the statement of Virgil M. Simmons, state conservation commissioner, that Indiana will become a "fisherman's paradise" as a result of the conservation department's program of stocking the streams and lakes with game fish, the elimination of pollution and the study of food conditions for fish.

The commissioner pointed out that the stocking of the streams and lakes is being carried out through the cooperation of conservation clubs which have a considerable number of physicians as members.



ANNUAL PHYSICAL EXAMINATION OF BARBERS  
NOT REQUIRED BY LAW

An annual examination of barbers by a registered physician is not required under provisions of the barbers' licensing act, Attorney General Philip Lutz, Jr., has ruled in an opinion written for Frank McKamey, secretary of the barbers' board.

Mr. McKamey had written to the attorney general asking whether the barbers are required to present a certificate from a registered physician when the barbers apply for the annual renewal of their licenses.

"No procedure is provided in the section for obtaining the renewal other than the payment of the required fee and I am persuaded that is all that is necessary in view of other provisions of the same section," the attorney general wrote.

A barber who has retired from the practice of barbering for more than three years "may renew his certificate of registration upon payment of the required restoration fee," the attorney general pointed out in his letter.

"The board, however, is not without power to refuse to renew a certificate where it is found that the applicant is afflicted with an infectious or communicable disease," Mr. Lutz held. He pointed out further that the licensing act "makes it unlawful for anyone to knowingly continue the practice of barbering while such person has an infectious, contagious or communicable disease." Refusal of the board to give a barber a renewal certificate on grounds he has such a disease must be preceded by a hearing, the attorney general's opinion held.

During the past five months seventy-three licenses have been suspended and eleven revoked for failure to comply with sanitary and other provisions of the Indiana barbers law, according to a report prepared by Frank McKamey, secretary of the board of barber examiners. The report showed that a number of hearings have been conducted by members of the board on charges of infractions during the period.

There have been several cases against barbers working without licenses, including eleven in Indianapolis. Convictions have been obtained on every such case taken into court, the report showed. Regular inspections are made of all barber and hair cutting shops to see that sanitary provisions of the law are observed.

The barbers license law was passed by the 1933 session of the state legislature, and was regarded as a forward step in public health protection.

\* \* \*

WAYNE COY ACTING DIRECTOR OF G. C. U. R.

Wayne Coy, of Delphi, undersecretary to Governor Paul V. McNutt, has been appointed acting director of the Governor's Commission on Unemployment Relief to succeed William H. Book who has resigned to become executive vice-president of the Indianapolis Chamber of Commerce.

The appointment was made by Governor McNutt

with the approval of Federal authorities. Mr. Coy has taken over his new duties.

Before becoming undersecretary to the Governor, Mr. Coy was engaged in the newspaper business and was publisher of a newspaper at Delphi. He is a graduate of Franklin college. As undersecretary Mr. Coy has been in charge of penal institution affairs, and has had considerable contact with work of the unemployment relief commission.

Governor McNutt, in announcing the appointment, intimated that eventually the state will set up a coordinated public welfare department, and there was speculation at the state house that eventually Mr. Coy might be put in charge of that division. Governor McNutt himself, however, did not discuss that possibility.

DIPHTHERIA REPORT FOR JULY, 1934

We are pleased to report that there were but two deaths during the month of July from diphtheria, a child of five and another of twelve years of age. It is very interesting in this connection to note that the average age at which diphtheria deaths now occur is definitely and considerably higher than it was some time ago. This probably means that the younger portion of the population is better protected against diphtheria than the older portion. Not unlikely this is due to the recent activity in immunizing those under ten years of age.

The two cases were from Lawrence and Fayette counties, one each. This makes five deaths from diphtheria from Lawrence County, making that county have the highest rate of any county in the entire state.

For the first seven months of the year there is a total of forty-seven deaths, which is approximately 25% less than the lowest previous figure at this time of the year. We await with some anxiety the opening of the schools, and are extremely concerned for the months of October, November, and December, and hope that they may be held to lower levels than before has been customary.

The total number of cases by counties for the month of July are given below, along with a record of the number of cases for the first half of the year.

July		Total for	July		Total for
1934		1934	1934		1934
Allen	0	6	Lawrence	1	5
Blackford	0	1	Marion	0	5
Delaware	0	1	Martin	0	1
Dubois	0	2	Montgomery	0	1
Fayette	1	1	Perry	0	4
Gibson	0	1	Randolph	0	1
Grant	0	1	Spencer	0	2
Greene	0	2	Warrick	0	1
Harrison	0	1	Vanderburgh	0	2
Jackson	0	2	Vermillion	0	1
Knox	0	2	Wayne	0	2
Lake	0	2			
			Total	2	47

## SECRETARIES' COLUMN

Next month will see the annual activities of the Indiana State Medical Association at their height.

There will be this paper and that paper; this exhibit and that exhibit; and best of all will be the meeting of friends.

There will be some very interesting and vital problems to be solved, problems that every secretary should be familiar with—both legislative and economic.

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In November comes the election. This year, if never before, the medical societies should become militant and work for those politicians that are favorable to them. The medical societies should work hard. The problems of state insurance for health, old age, unemployment, etc., are sure to show themselves in both the state legislature and congress. With all of this facing us, we will have to work and work hard.

In September, the meetings of the county societies usually are resumed. This year, before November, have one of your meetings devoted exclusively to politics and associated problems. I am sure that Mr. Hendricks will supply all the necessary material for this meeting.

By the way, be sure to have the druggists and nurses informed of what you are going to do politically. They are interested and will help a great deal. You need votes and you must get them.

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Warn the members of your society to pay no money to a young man who calls himself James Cooper, says he is the son of a physician, and solicits subscriptions to A. M. A. publications. He is not authorized to collect money or take subscriptions for A. M. A. publications.

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This fall will be a good time to get all eligible doctors into your society. You can show them that you are working for their interest and that their interest needs their help and cooperation.

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I understand that Lake County wants the State meeting at Gary in 1935. Tell your delegates.

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Have you had your vacation? I have, and didn't catch a fish!

A. M. MITCHELL, M. D., *Chairman*.

## DEATH NOTICES

EDWARD J. LIBBERT, M. D., Aurora, died August second, aged sixty-five years. Since 1896, Dr. Libbert had practiced in Aurora. He was active in civic and social affairs in the community and had served as mayor of Aurora for more than six years. He was a member of the Dearborn-Ohio County Medical Society, the Fourth District Medical Society (in both of which societies he had held various offices), the Indiana State Medical Association, and the American Medical Association. Dr. Libbert graduated from the Cincinnati College of Medicine and Surgery in 1889.

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S. L. ADAIR, M. D., Jeffersonville, committed suicide, August second. Dr. Adair was a graduate of the Kentucky University Medical Department, Louisville, in 1893.

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J. W. SMITH, M. D., Terre Haute, died July twenty-sixth, aged seventy-two years. Dr. Smith was a graduate of the Homeopathic Medical College of Missouri in 1891.

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J. W. LORENZ, M. D., Evansville, retired physician and druggist, died July twenty-eighth, aged seventy-six years. He graduated from the Louisville Medical College in 1903.

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J. C. CARSON, M. D., Frankfort, died July twenty-seventh, aged seventy-two years. Dr. Carson graduated from the Medical College of Indiana, Indianapolis, in 1880.

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HARRY JOHN THOMPSON, M. D., Indianapolis, died August twelfth. He was affiliated with the United States Veterans' Bureau Hospital in Indianapolis. Dr. Thompson graduated from the Medical School of Harvard University in 1894.

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E. A. STURM, M. D., Jasper, died August tenth, aged sixty-five years. Dr. Sturm served in the medical corps of the U. S. Army during the World War. He was a graduate of the Kentucky School of Medicine, Louisville, in 1904.

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HARRY L. BELL, M. D., Knox, died August seventh, aged fifty-seven years. Dr. Bell was a graduate of the Chicago College of Medicine and Surgery in 1908. He was a member of the Lake County Medical Society, the Indiana State Medical Association and the American Medical Association.



# HOOSIER NOTES

DR. RICHARD B. NELSON has located in Hammond for the practice of medicine.

DR. GEORGE W. FINLEY (deceased), of Brazil, left his medical library to the Clay County Hospital.

MRS. MARY J. GARDINER and Dr. A. R. Simon, both of LaPorte, were married July nineteenth.

DR. F. T. ROMBERGER, Lafayette, addressed members of the Tipton Kiwanis Club, July thirty-first.

DR. E. F. JONES, of Marion, recently did some postgraduate work in prostatic surgery at the University of Iowa.

DR. MARTHA LYON, South Bend, attended a meeting of ophthalmologists in Rochester, New York, the first of August.

THE American Academy of Ophthalmology and Otolaryngology will meet in Chicago, September tenth to fourteenth, with headquarters at the Hotel Sherman.

DR. L. D. HOLLIDAY, of Fairmount, was the principal speaker at the meeting of the Gas City Kiwanis Club, July twenty-third.

DR. AND MRS. J. B. CUSHMAN have moved from Indianapolis to Darlington, where Dr. Cushman has taken over the office and practice of the late Dr. Peacock.

DR. JOHN ASA GIBBONS, of Mitchell, was knocked down by an automobile July eleventh, suffering a fracture of the right leg below the knee and a traumatic abscess of the left hip.

DR. LEONARD L. NESBIT, who has been connected with the Arnett-Crockett Clinic at Lafayette for the past five years, has purchased the equipment of the late Dr. Whitley, of Anderson, and has located in Anderson.

DR. CHARLES C. WILSON, who has been head of the department of health and physical education of the Evansville schools for the past six years, has accepted a similar position at Hartford, Connecticut. His successor in Evansville has not yet been appointed.

THE Tippecanoe County Medical Society will meet at Lincoln Lodge, Lafayette, September thirteenth. At 3:30 in the afternoon there will be a clinic at St. Elizabeth's Hospital, and following the dinner at Lincoln Lodge, Dr. J. P. Pratt, of Detroit, will discuss "Endocrine Disturbances Peculiar to Women."

On Tuesday, October ninth, at 2:00 p. m., the district chairmen of Child Health will meet in Indianapolis to discuss projects for the coming year. The meeting will be held at the Claypool Hotel. Members of the various committees and others interested in Child Health are invited to attend. Discussions of "The Indigent" and "Childhood Tuberculosis" are scheduled.

DR. F. L. RECTOR, of New York, field representative of the American Society for the Control of Cancer, addressed members of the St. Joseph County Medical Society at South Bend, July twenty-sixth. The society is conducting a symposium on cancer, during which several papers will be presented. Dr. Alfred Ellison is in charge of this work.

DR. E. N. KIME, Indianapolis, is chairman of the Mid-Western Section of the American Congress of Physical Therapy which will hold its thirteenth annual session in Philadelphia, September tenth to thirteenth, inclusive. Dr. Kime also will present a paper on "Cancer Prognosis" as a part of a symposium on cancer.

THE next meeting of the Eleventh Indiana Council District will be held at Longcliff State Hospital, near Logansport, Wednesday, October seventeenth. Hosts will be members of the Cass County Medical Society. A clinical session will be held at 10:00 o'clock in the morning, a business and scientific session in the afternoon, and a banquet with entertainment following in the evening. All physicians in Indiana (in good standing) are invited to attend this meeting. A more complete program will be published in the October issue.

THE International Assembly of the Inter-State Postgraduate Medical Association of North America will be held in the Public Auditorium, Philadelphia, Pennsylvania, November 5-9, 1934. Many distinguished teachers and clinicians will appear on the program. A major list of the names of the contributors to the program, with other information, appears on page xvi of this JOURNAL. All members of the Indiana State Medical Association are cordially invited to attend. Registration fee of five dollars admits all members of the profession in good standing.

EXHIBITS and demonstrations in the Good Health Building at the State Fair, September 1 to 7, will be under the sponsorship of the Indiana State Medical Association, the Indiana State Dental Association, the Hospital Association, the Tuberculosis Association, and the Indianapolis College of Pharmacy. There will be a puppet show, a demonstration of interesting facts concerning cosmetics, demonstrations of injuries to the eye, and visitors will be invited to have tests made for color blindness. A nurse from the Indiana University hospitals will be present every day to take subscriptions for *Hygeia*, the health magazine.

THE 1934 Medico-Military Symposium for Medical Department Reserve Officers of the Army and Navy will be held at the Mayo Clinic, October 7th to 20th, both dates inclusive. This is the sixth annual inactive duty training course to be held at the Mayo Clinic. Morning hours will be devoted to attending clinics on subjects selected by the student officers; afternoon and evening hours will be given over to work in Medico-Military subjects, the program for which will be under the supervision of Colonel Kent Nelson, M. C., U. S. Army, and Captain J. B. Mears, M. C., U. S. Navy. Applications for the course should be made either to the Corps Area Surgeon, Seventh Corps Area, Omaha, Nebraska, or to the District Medical Officer, Ninth Naval District, Great Lakes, Illinois. Applications should state the character of the work the candidate desires to follow in the morning hours. All student officers are expected to attend and participate in the afternoon and evening sessions. Invitation to accept the course of study without charge is extended by the Mayo Clinic and the project is without expense to the government. One hundred hours' credit will be given to those who take and complete the course.

THE Indiana Tuberculosis Association is offering short courses in tuberculosis to the physicians of Indiana; several sanatoria in the state will be used as teaching centers in the various communities. However, any one wishing to attend the course may select any place preferred. Instruction will follow the round table method. Two sessions each day will be devoted to clinics and demonstrations. Clinical material for the work will be available. Topics will include laboratory aids, history, clinical study, and physical examination of patients, treatment, differential diagnosis, other respiratory diseases, childhood tuberculosis, and practical demonstrations. Courses will be presented at Boehne Tuberculosis Hospital, Evansville, August 30 and 31; at Indiana State Sanatorium, Rockville, October 2 and 3; Irene Byron Sanatorium, Fort Wayne, October 17 and 18; Lake County Tuberculosis San-

atorium, Crown Point, October 18 and 19; Sunnyside Sanatorium, Indianapolis, October 22 and 23; and William Ross Sanatorium, Lafayette, dates to be announced later. Work at the Boehne Tuberculosis Hospital will be in the nature of ward rounds entirely. Further information and application blanks may be obtained by writing to the Indiana Tuberculosis Association, Room 1219, 130 East Washington Street, Indianapolis. There will be no fee attached to the course, which is being presented as an aid to the medical profession.

#### OPENING OF NEW LILLY RESEARCH LABORATORIES

The new Lilly Research Laboratories will be formally opened Thursday afternoon, October 11, following the adjournment of the meeting of the Indiana State Medical Association.

These laboratories are a notable acquisition to the medical resources of the nation and will add much to the prestige of this state. The event will be attended by many distinguished physicians and others engaged in research in the medical field.

Details of the program will be published in the October issue of *THE JOURNAL*. Features that are definitely settled at this time are:

Luncheon at the Lilly Laboratories at noon, Thursday, October 11, to which all members of the Association will be invited as guests of the Lilly Company. The invitations also include the formal opening exercises following at 2:00 o'clock.

Sir Henry Dale, Director of the National Institute for Medical Research, London; Sir Fredrick Banting, University of Toronto; and Dr. Irving Langmuir, Director of Research for the General Electric Company, three men of international fame in medical and chemical research, are to speak.

IN addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Carbide and Carbon Chemicals Corporation, Triethanolamine-Carbide and Carbon Chemicals Corporation.

Lakeside Laboratories, Inc., Ampoules Dextrose (d-Glucose) 50 gm., 100 c.c.

Eli Lilly & Co., Ampoules Glucose (Dextrose, U. S. P.) Lilly, Unbuffered, 25 gm., 50 c.c.; Ampoules Glucose (Dextrose, U. S. P.) Lilly, Buffered, 25 gm., 50 c.c.; Ampoules Glucose (Dextrose, U. S. P.) Lilly, Unbuffered, 50 gm., 100 c.c.

Sharp & Dohme, Inc., Ivyol-Poison Ivy Extract—Mulford, one syringe package.

United States Standard Products Co., Diphtheria Toxoid, Alum Precipitated (Refined); Erysipelas Streptococcus Antitoxin (Refined and Concentrated); Dextrose Solution, 25 gm., 50 c.c.; Dextrose Solution, 50 gm., 100 c.c.



MORE ABOUT TRAP-SHOOTING

The Trap-shooting Tournament for members of the Indiana State Medical Association will be held on the afternoon of October ninth, the first day of the annual session. This tournament will take place at the Indianapolis Gun Club grounds, Lynnhurst Drive and West Washington Street, beginning at 2:00 o'clock. Traps will be open one hour earlier for practice. On the grounds is a large club house with a spacious veranda facing the firing line; fine water from a deep driven well; and four traps. The skyline for shooting is perfect. Experienced trappers, pullers, and score keepers will be on hand to serve the shooters. Those who prefer to do so may bring their own ammunition, but the club will have a large supply of regulation trap-hold shells which can be purchased at near-cost prices. Targets are sold at the usual price of one and one-half cents. Each contestant will be classified according to his known ability so that the beginners will have an equal chance with the experts. There will be four classes in the 16-yard event and a distance yardage in the handicap. This plan is made to help the weak shooters. In the doubles event it will be every fellow for himself. Each contestant must bring his own gun, which need not be a regular trap gun. Your old "fowling piece" that you use on rabbits and quail will do the work if you know how to point it. Appropriate prizes will be presented to the winners. What a thrill you will have to show the "Missus" one or more of these and tell her how you won them.

The committee has arranged the following program: Four 16-yard events of 25 targets each; one 25-target handicap event and one doubles event of 12 pairs, a total of 149 targets. All ties will be shot off at the completion of the regular program on the miss and out plan.

Many doctors enjoy field and trap shooting and a large and enthusiastic attendance is anticipated, which the gun club is amply prepared to handle.

If you wish to participate, kindly complete the coupon below and mail it to Dr. Leonard A. Ensminger.

L. A. Ensminger, M. D.,  
908 Hume Mansur Bldg.,  
Indianapolis, Ind.

Add my name to the list of those who will take part in the trap shooting tournament, October ninth.

Name .....

Address .....

INDIANA UNIVERSITY NEWS NOTES

INTERNESHIP appointments in 43 different hospitals throughout the United States have been received by 107 members of this year's Indiana University School of Medicine graduating class. Seventy-seven of the young doctors will do their interne work in 15 Indiana hospitals, while the remaining 30 will be located in 28 different out-of-state hospitals. Six members of this year's class have entered into private practice, and one member, Dr. Hugh E. Martin of Shelburn, has been granted the Landon Research Fellowship in the I. U. hospitals.

Twenty-eight of the young I. U. physicians will be located at the Indianapolis City Hospital, 18 at the three Indiana University hospitals located in Indianapolis, 10 at the Indianapolis Methodist Hospital, and 7 at St. Vincent's Hospital, also of Indianapolis. Other Indiana hospitals where I. U. graduates have received appointments as internes are: St. Margaret's Hospital, Hammond; St. Elizabeth's Hospital, Lafayette; Sunnyside Sanatorium, Oaklandon; Deaconess Hospital, Evansville; St. Francis Hospital, Beech Grove; Welborn-Walker Hospital, Evansville; Lutheran Hospital, Fort Wayne; Cragmont, Madison; St. Mary's Hospital, Gary; School for Feeble-minded Youth, Fort Wayne; and St. Joseph's Hospital, South Bend.

The complete list is as follows:

Indianapolis City Hospital: Wendell Anderson, Mentone; Paul B. Arbogast, Bloomington; Fred-eric Baer, Indianapolis; Ralph Blackford, Middle-town, Ohio; Eleanor Blackledge, Indianapolis; Adolph Blatt, Indianapolis; Henry Bodner, Indian-apolis; Norman Booher, West Lafayette; Kenneth Comer, Mooresville; Rex Dixon, Indianapolis; Perry Cotton, Elwood; David Engle, Frankfort; Benjamin Klain, Indianapolis; Arthur Leiter, Ken-dallville; Ermil Leslie, Folsomville; Earl Mericle, Bargersville; Basil Merrell, Waynetown; Temple Miller, North Judson; Almeda Morris, New Haven; Hugh Navin, Terre Haute; Preston Nesbit, Prince-ton; Frank Oliphant, Indianapolis; Robert Spin-dler, Cedar Lake; Richard Terrill, Lawrenceburg; Hugh Thatcher, Jr., Indianapolis; Joseph West, Indianapolis; Robert Wisehart, North Salem; John Young, Indianapolis.

Indiana University hospitals, Indianapolis: Mel-vin Durkee, Evansville; Mrs. Florence Falvey, In-dianapolis; Max Garber, North Manchester; Mau-rice Glock, Fort Wayne; James Hawk, New Pales-tine; Robert Jewett, Wabash; David Levy, Youngs-town, Ohio; Frederick Malott, Converse; James McElroy, Newberry; Vernon Pancost, Elkhart; Edgar Richards, Terre Haute; Lillian Scheib, South Bend; Thomas Tower, Leavenworth; Wil-liam Vance, Indianapolis; Robert Webster, Indian-apolis; Aubrey Williams, Fort Wayne; Don Wol-fram, Brownsburg; Harold Zwick, Decatur.

Methodist Hospital, Indianapolis: Frank Coble, Richmond; Robert Fraser, Marion; Robert Hart, Columbus; Charles Holland, Bloomington; William Mount, Kirklint; Robert Owsley, Thorntown; Charles Proudfit, Osceola; Dick Steele, Huntington; William Sutton, Cambridge City; Abram S. Woodward, Jr., Indianapolis.

St. Vincent's Hospital, Indianapolis: George Brother, Rockport; Wendell Brown, Indianapolis; Neal Carter, Indianapolis; Darrell Overpeck, Brazil; O. Raymond Russell, Lapel; Charles Schutt, Elkhart; John Surber, Muncie.

St. Margaret's Hospital, Hammond: M. R. Paragas, Indianapolis; Michael Shellhouse, Gary.

St. Elizabeth's Hospital, Lafayette: Samuel Scott, Jeffersonville; Robert McElroy, Scotland; Carl Trout, Windfall.

Sunnyside Sanatorium, Oaklandon: Donald Brodie, Oaklandon.

Deaconess Hospital, Evansville: Grace Kaufman, Gallipolis, Ohio.

St. Francis Hospital, Beech Grove: Henry Coleman, Palmyra.

Welborn - Walker Hospital, Evansville: John Combs, Indianapolis.

Lutheran Hospital, Fort Wayne: August Hase-winkle, Indianapolis.

Cragmont, Indiana State Hospital, Madison: Gladys Hill, Indianapolis.

St. Mary's Hospital, Gary: Robert Hill, Muncie.

School for Feeble-minded, Fort Wayne: Julia Kuzmitz, Gary.

St. Joseph's Hospital, South Bend: Robert Miller, Argos.

Sacred Heart Hospital, Spokane, Wash.: Marion Aker, Reelsville.

Lucas County Hospital, Toledo, Ohio: Frank Albertson, Vallonia, and Frederick Giles, Bloomington.

McKeesport Hospital, McKeesport, Pa.: Jesse Ambrose, Anderson.

Lutheran Memorial Hospital, Chicago, Ill.: Theodore Arlook, Elkhart.

Gorgas Hospital, Ancon, Panama Canal Zone: Ralph Barnett, Franklin.

Wheeling Hospital, Wheeling, Pa.: T. T. Benchea, Indiana Harbor.

Cleveland City Hospital, Cleveland, Ohio: William Clauser, Delphi.

Mercy Hospital, Canton, Ohio: William Ferraro, Paterson, N. J.

Santa Barbara Cottage Hospital, Santa Barbara, Calif.: Thomas Hardesty, Marion.

Foote Memorial Hospital, Jackson, Mich.: Carl Harris, Hobart.

Letterman General Hospital, San Francisco, Calif.: Richard Inwood, South Bend.

Ellis Hospital, Schenectady, N. Y.: Richard Holdeman, Elkhart.

Highland Park General Hospital, Highland Park, Mich.: Charles Holder, Indianapolis.

St. Elizabeth's Hospital, Youngstown, Ohio: William Maine, Youngstown, Ohio.

West Suburban Hospital, Oak Park, Ill.: Otis McQuiston, Paxton, Ill.

Fairview Hospital, Minneapolis, Minn.: George Mitchell, Indianapolis.

North Hudson Hospital, Weehawken, N. J.: S. R. Monachina, New York.

Louisville City Hospital, Louisville, Ky.: Hugh Ramsey, Bloomington.

Lutheran Hospital, Des Moines, Iowa: Granville Richey, Columbus, Iowa.

Kansas City Hospital, Kansas City, Mo.: Wayne Ritter, Indianapolis.

Good Samaritan Hospital, Portland, Oregon: Charles P. Schneider, Evansville.

St. Joseph Hospital, Far Rockaway, New York City: Philip Skipper, New York City.

Mercy Hospital, Bay City, Mich.: William Storer, Muncie.

General Hospital, Los Angeles, Calif.: Marshall Tucker, Claypool.

St. Mary of Nazareth Hospital, Chicago: Anthony Ventimiglia, Bloomington.

General Hospital, Philadelphia, Pa.: George H. Wilson, Dale.

Provident Hospital, Baltimore, Md.: L. B. Young, Indianapolis.

People's Hospital, Akron, Ohio: Paul Zwerner, Terre Haute.

Members of this year's class going directly into practice are: N. J. Bohannon, Terre Haute; David Bornstein, Paterson, N. J.; Oran Kay, Spencer; William Paris, Paterson, N. J.; J. Thayer Waldo, Indianapolis; and Robert Wybourn, Ossian.

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Two new private medical collections have been announced by Librarian Allan Hendricks as recent gifts to the Indiana University Medical Library. A gift of 130 volumes comes from the private medical library of Dr. Joseph N. Study, Cambridge City, Ind. Dr. Study has been in the practice of medicine for 57 years, 55 years of this time in Cambridge City. He is a graduate of the Bellevue Hospital Medical College of New York City.

Robert R. Litz of the Medical and Dental Equipment Exchange, Indianapolis, has made a gift to the library of an important six-volume edition on internal diseases and a separate medical index. He has also contributed to the medical library a "spring lance" used by old-time physicians in blood letting. Librarian Hendricks described it as a "welcome addition to our museum of old medical instruments."

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A TOTAL of 1,179 patients were cared for by the three Indiana University hospitals of Indianapolis during the month of June, according to the report



of J. B. H. Martin, administrator, Indiana University Medical Center. Seventy-three more patients were cared for by the I. U. hospitals during June of this year than during June of 1933.

The James Whitcomb Riley Hospital for Children had 564 patients; the William H. Coleman Hospital for Women, 344; and the Robert W. Long Hospital, 271. Of the 1,179 patients cared for by the three hospitals, 780 were bed-patients confined to the hospitals, and 399 were out-patients.

A total of 7,907 laboratory examinations were made during June by the three hospitals, and 2,474 out-patient visits were made.

## SOCIETIES AND INSTITUTIONS

### INDIANA STATE MEDICAL ASSOCIATION

#### REPORT OF THE SPECIAL COMMITTEE\* ON REVISION AND CODIFICATION OF CONSTITUTION AND BY-LAWS

*House of Delegates, Indiana State Medical Association:*

Gentlemen—After careful search of the minutes of the meetings of the House of Delegates since the revision and adoption of the Constitution and By-Laws in 1926, your committee first collected and correlated all amendments to the Constitution and By-Laws and the Standing Resolutions. While some of these amendments appeared in the minutes in the form of a resolution, they had in fact been acted upon by the House of Delegates in the same way as formal amendments, and on the advice of legal counsel they were considered binding as amendments.

This codification and correlation by the committee was then submitted to sixteen members of the Association representing all sections of the state, with a request for suggestions as to possible further improvement in the Constitution and By-Laws. Such suggested changes as the committee considered, after careful study, to warrant the attention of the House of Delegates, are presented herewith, printed in blackface type in the form of complete substitute sections immediately following the section designed to be changed. Otherwise, the following report represents the Constitution and By-Laws as they should be printed to date, with no changes by the committee except the transposition of a few sentences from one section to another for the purpose of better correlation.

This revision and codification is printed in this issue of THE JOURNAL so that all members may have the opportunity to study it before its presentation before the House of Delegates.

\* This committee was appointed as the result of a suggestion made by Dr. Weinstein, past president, in his annual address at the French Lick session.

The committee wishes to express its thanks to all who have lent their aid in this matter.

WILLIAM N. WISHARD, *Chairman.*

JOSEPH H. WEINSTEIN.

ALEXANDER W. CAVINS.

ALBERT STUMP, *Attorney.*

THOMAS A. HENDRICKS,  
*Executive Secretary.*

### CONSTITUTION AND BY-LAWS OF THE INDIANA STATE MEDICAL ASSOCIATION

#### ARTICLE I.—NAME OF THE ASSOCIATION

The name and title of this organization shall be the Indiana State Medical Association.

#### ARTICLE II.—PURPOSES OF THE ASSOCIATION

The purposes of this Association shall be to federate and bring into one compact organization the entire medical profession of the State of Indiana, and to unite with similar societies of other states to form the American Medical Association; to extend medical knowledge and advance medical science; to elevate the standard of medical education, and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members and to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of state medicine, and public health, so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

#### ARTICLE III.—COMPONENT SOCIETIES

Component Societies shall consist of those county medical societies which hold charters from this Association.

#### ARTICLE IV.—COMPOSITION OF THE ASSOCIATION

SECTION 1.—This Association shall consist of Members, Delegates, Guests, and Associate and Honorary Members.

SEC. 2.—*Members.*—The members of this Association shall be the members of the component county medical societies.

SEC. 2.—*Members.*—The members of this Association shall be the members of the component county medical societies. Membership in a county medical society on a basis not including membership in the Indiana State Medical Association is not recognized.

SEC. 3.—*Delegates.*—Delegates shall be those members who are elected in accordance with this Constitution and By-Laws to represent their respective component societies in the House of Delegates of this Association.

SEC. 4.—*Associate Members*.—Members of the Indiana State Dental Association in good standing are, by virtue of their membership therein, made associate members of the Indiana State Medical Association.

SEC. 5.—*Honorary Members*.—Honorary members shall consist of representative teachers and students of science allied to medicine, and of physicians and surgeons of distinction not members of the Indiana State Medical Association, who may by vote of the House of Delegates be elected to honorary membership; and any physician of the State of Indiana who has attained the age of seventy-five years and has held membership in the Indiana State Medical Association for twenty years or more, may be elected to honorary membership by majority vote of the House of Delegates, provided his name be proposed for such honorary membership by the county medical society of which such physician is a member, and payment for THE JOURNAL of the Indiana State Medical Association by such county medical society which proposed such name for honorary membership.

SEC. 5.—*Honorary Members*.—Honorary members shall consist of representative teachers and students of science allied to medicine, and of physicians and surgeons of distinction not members of the Indiana State Medical Association, who may by vote of the House of Delegates be elected to honorary membership; and any physician of the State of Indiana who has attained the age of seventy-five years and has held membership in the Indiana State Medical Association for twenty years or more may be elected to honorary membership by vote of the House of Delegates, provided his name be proposed for such honorary membership by the county medical society of which such physician is a member.

SEC. 6.—*Guests*.—Any distinguished physician not a resident of this state who is a member of his own State Association may become a guest during any Annual Session on invitation of the officers of this Association, and shall be accorded the privilege of participating in all of the scientific work for that session.

#### ARTICLE V.—HOUSE OF DELEGATES

The House of Delegates shall be the legislative and business body of the Association, and shall consist of (1) Delegates elected by the component county societies; (2) the Councilors; (3) the ex-Presidents of the Indiana State Medical Association; and (4) *ex officio*, the President, the President-elect, the Executive Secretary, and the Treasurer of this Association, without power to vote, except in case of a tie vote when the President shall cast the deciding vote.

#### Article V.—House of Delegates

The House of Delegates shall be the legislative and business body of the Association, and shall consist of (1) Delegates elected by the component county societies; (2) the Councilors; (3) the ex-

Presidents of the Indiana State Medical Association; and (4) *ex officio*, the President, the President-elect, the Executive Secretary, the Treasurer of this Association, and the delegates to the American Medical Association, all without power to vote, except in case of a tie vote when the President shall cast the deciding vote.

#### ARTICLE VI.—COUNCIL

The Council shall consist of (1) the Councilors, and (2) *ex officio*, the President, President-elect, Executive Secretary, and Treasurer. Besides its duties mentioned in the By-Laws, it shall constitute the Board of Trustees of this organization, having full charge and control of all the property of the Association. It shall have full authority and power of the House of Delegates between sessions of the House of Delegates, and at all times shall be the finance committee of the Association. Five Councilors shall constitute a quorum.

#### Article VI.—Council

The Council shall consist of (1) the Councilors, and (2) *ex officio*, the President, President-elect, Executive Secretary, and Treasurer. Besides its duties mentioned in the By-Laws, it shall constitute the Board of Trustees of this organization, having full charge and control of all the property of the Association. It shall have full authority and power of the House of Delegates between sessions of the House of Delegates, except that it shall not make changes in the laws governing the Association nor exercise legislative functions, and at all times shall be the finance committee of the Association. Five Councilors shall constitute a quorum.

#### ARTICLE VII.—SECTIONS AND DISTRICT SOCIETIES

The House of Delegates may provide for a division of the scientific work of the Association into appropriate Sections, and for the organization of such Councilor District Societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

#### ARTICLE VIII.—SESSIONS AND MEETINGS

SECTION 1.—The Association shall hold an Annual Session during which there shall be held daily general meetings, and such section meetings as may be provided for, all of which shall be open to all registered members and guests.

SEC. 2.—The time and place for holding each Annual Session shall be fixed by the House of Delegates at the preceding Annual Session.

SEC. 3.—Special sessions of either the Association or the House of Delegates shall be called by the President on petition of twenty delegates or fifty members.

#### ARTICLE IX.—OFFICERS

SECTION 1.—The officers of this Association shall be a President, a President-elect, an Executive Secretary, a Treasurer, and thirteen Councilors.



SECTION 1.—The officers of this Association shall be a President, a President-elect, an Executive Secretary, a Treasurer, and thirteen Councilors, each of whom shall be a physician in active private practice, except the Executive Secretary, who need not necessarily be either a physician or a member.

SEC. 2.—The officers, except the Councilors and the Executive Secretary, whose election has been provided for hereinafter, shall be elected annually. The terms of elected Councilors shall be for three years, and approximately one-third of the number shall be elected annually. All of these officers shall serve until their successors are elected and installed.

SEC. 2.—The officers, except the Councilors, shall be elected annually. The terms of elected Councilors shall be for three years, and approximately one-third of the number shall be elected annually. All of these officers shall serve until their successors are elected and installed.

SEC. 3.—The officers of this Association shall be elected by the House of Delegates on the morning of the last day of the Annual Session, but no delegate shall be eligible to any office named in the preceding section, except that of Councilor, and no person shall be elected to any such office who is not in attendance on that Annual Session, and who has not been a member of the Association for the preceding two years.

SEC. 3.—The officers of this Association shall be elected by the House of Delegates on the morning of the last day of the Annual Session, but no delegate shall be eligible to any office named in the preceding section, except that of Councilor, and no person shall be elected to any such office who is not in attendance on that Annual Session, and/or who has not been a member of the Association for the preceding two years.

SEC. 4.—The Councilors shall be elected by the respective district societies, providing that if any district shall exist without a society, or if the district society fails to meet and elect its Councilor and notify the House of Delegates before or at the time of the Annual Session, the Councilor for such a district shall be elected by the House of Delegates. Provided further, That if a Councilor district society fails to meet and elect its Councilor, the Councilor for that district shall be elected by the House of Delegates.

#### ARTICLE X.—RECIPROCITY OF MEMBERSHIP WITH OTHER STATE SOCIETIES

In order to broaden professional fellowship this Association is ready to arrange with other State Medical Associations for an interchange of certificates of membership, so that members moving from one state to another may avoid the formality of re-election.

#### ARTICLE XI.—FUNDS AND EXPENSES

Funds shall be raised by an equal per capita assessment on each component society. The amount

of the assessment shall be fixed by the House of Delegates. Funds also may be raised by voluntary contributions, from the Association's publications, and in any other manner approved by the House of Delegates. Funds may be appropriated by the House of Delegates to defray the expenses of the Association, for publication, and for such other purposes as will promote the welfare of the profession. All motions and resolutions appropriating funds must be referred to the Council for approval before final action is taken thereon.

#### ARTICLE XII.—REFERENDUM

SECTION 1.—A General Meeting of the Association may, by a two-thirds vote of the members present, order a general referendum on any question pending before the House of Delegates, and when so ordered the House of Delegates shall submit such question to the members of the Association, who may vote by mail or in person, and if the members voting shall comprise a majority of all the members of the Association, a majority of such vote shall determine the question and be binding on the House of Delegates.

SEC. 2.—The House of Delegates may, by a two-thirds vote of its own members, submit any question before it to a general referendum, as provided in the preceding section, and the result shall be binding on the House of Delegates.

#### ARTICLE XIII.—THE SEAL

The Association shall have a common Seal, with power to break, change or renew the same at pleasure.

#### ARTICLE XIV.—AMENDMENTS

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates present at any Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been published twice during the year in THE JOURNAL of this Association.

#### BY-LAWS

##### CHAPTER I.—MEMBERSHIP

SECTION 1.—Any physician who is a member in good standing of a component county society and who has paid to this Association his annual dues is a member in good standing of the Indiana State Medical Association.

SEC. 2.—No person who is under sentence of suspension or expulsion from a component society, or whose name has been dropped from its roll of members, shall be entitled to any of the rights or benefits of this Association, nor shall he be permitted to take part in any of its proceedings until he has been relieved of such disability.

SEC. 3.—Each member in attendance at the Annual Session shall register by indicating the com-

ponent society of which he is a member. When his right to membership has been verified, by reference to the roster of his society, he shall receive a badge, which shall be evidence of his right to all the privileges of membership at that session. No member shall take part in any of the proceedings of an Annual Session until he has complied with the provisions of this section.

#### CHAPTER II.—GENERAL MEETINGS

SECTION 1.—All registered members may attend and participate in the proceedings and discussions of the General Meetings and the meetings of the Sections. The General Meetings shall be presided over by the President or by the President-elect, and before them shall be delivered the address of the President and the orations, unless the Committee on Scientific Work, with the sanction and approval of the officers, shall arrange otherwise.

SEC. 2.—The General or Section Meetings may recommend to the House of Delegates the appointment of committees or commissions for scientific investigation of special interest and importance to the profession and public.

SEC. 3.—No address or paper before the Association, except those of the President and orators, shall occupy more than twenty minutes in its delivery; and no member shall speak longer than five minutes, nor more than once on any subject, except by unanimous consent, except the first discussant, who shall be allowed ten minutes.

SEC. 4.—All papers read before the Association or any of the Sections shall become its property and shall not be published in any but the official publications of this Association, except by consent of the officers and the Editorial Board of this Association. Each paper shall be deposited with the Executive Secretary when read.

SEC. 5.—The Indiana State Medical Association shall appropriate from its funds the sum of Five Hundred Dollars (\$500) annually for the entertainment of its members and guests, this money to be expended at the direction of the President, Executive Secretary, and Treasurer of the State Association, and the Chairman of the Entertainment Committee, who is appointed annually by the President of the Association. All money in excess of that expended for actual expenses incurred at that session is to revert each year to the treasury of the State Association.

SEC. 5.—The Indiana State Medical Association shall appropriate from its funds the sum of Four Hundred Dollars (\$400) annually for the entertainment of its members and guests, this money to be expended at the direction of the President, Executive Secretary, and Treasurer of the State Association, and the Chairman of the Entertainment Committee, who is appointed annually by the President of the Association. All money in excess of that expended for actual expenses incurred at that session is to revert each year to the treasury of the State Association.

#### CHAPTER III.—SECTIONS

SECTION 1.—During the Annual Session, the Association may meet in the following Sections:

- a. Surgical,
- b. Medical,
- c. Eye, Ear, Nose and Throat.
- d. Any other Sections that hereafter may be provided for by the House of Delegates.

SEC. 2.—The officers of each Section shall be a Chairman, a Vice-Chairman, and a Secretary, and they shall preside over the meetings of the Sections.

SEC. 2.—The officers of each Section shall be a Chairman, a Vice-Chairman, and a Secretary, and they shall preside over the meetings of the Sections, and shall be responsible to the Committee on Scientific Work for the Section speakers and papers.

SEC. 3.—The election of officers of the Sections shall be the first order of business of the last meeting of the Sections during the Annual Session.

SEC. 4.—No Section meeting shall be allowed to conflict with a general meeting.

#### CHAPTER IV.—HOUSE OF DELEGATES

SECTION 1.—The House of Delegates shall meet the day before or during that fixed as the first day of the scientific meeting of the general assembly. It may adjourn from time to time as may be necessary to complete its business, provided that its hours shall conflict as little as possible with the General or Section Meetings. It shall meet on the morning of the last day of the Annual Session for the election of officers for the ensuing year, and for the completion of any business previously introduced. The order of business shall be arranged as a separate section of the program.

SECTION 1.—The House of Delegates shall meet the day before or during that fixed as the first day of the scientific meeting of the Annual Session. It may adjourn from time to time as may be necessary to complete its business, provided that its hours shall conflict as little as possible with the General or Section Meetings. It shall meet on the morning of the last day of the Annual Session for the election of officers for the ensuing year, and for the completion of any business previously introduced. The order of business shall be arranged as a separate section of the program.

SEC. 2.—Each component county society shall be entitled to send to the House of Delegates each year one delegate for every fifty members, and one for each major fraction thereof; but irrespective of the number of members, each component society which has made its annual report and paid its assessments as provided in this Constitution and By-Laws shall be entitled to one delegate. The names of duly elected delegates from each component society shall be sent to the Executive Secretary of this Association at least thirty days prior to the date of the Annual Session at which such



delegates are to serve. If any component county medical society is without representation at the end of the roll call, then the members registered in attendance from that county may select from their number a delegate to serve until the regular delegate or alternate appears.

SEC. 2.—Each component county society shall be entitled to send to the House of Delegates each year one delegate for every fifty members, and one for each major fraction thereof; but irrespective of the number of members, each component society which has made its annual report and paid its assessments as provided in this Constitution and By-Laws shall be entitled to one delegate. The names of duly elected delegates and alternates from each component society shall be sent to the Executive Secretary of this Association annually on or before June first prior to the Annual Session at which such delegates are to serve. No one shall be entitled to a seat in the House of Delegates unless his credentials as a delegate or alternate, properly signed by the Secretary and President of his county society, be presented to the Committee on Credentials at the time of the Annual Session. If any component county medical society is without representation at the end of the roll call, then the members registered in attendance from that county may select from their number a delegate to serve until the regular delegate or alternate appears, and any delegate so named must receive a vote of affirmation from the House of Delegates before he can be seated.

SEC. 3.—Twenty delegates shall constitute a quorum.

SEC. 4.—It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

SEC. 5.—It shall divide the state into Councilor Districts, specifying what counties each district shall include, and when the best interests of the Association and profession will be promoted thereby, organize in each district a medical society, and all members of component county societies, and no others, shall be members of such district societies.

SEC. 6.—It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates. Such committees shall report to the House of Delegates, and the members of such committees may be present and participate in the debate on their reports.

SEC. 7.—It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective.

SEC. 8.—Funds may be appropriated by the House of Delegates, subject to approval by the Council, for such purposes as will promote the welfare of the Association and the profession.

SEC. 9.—At the first meeting, the President shall appoint from among the members of the House of Delegates, Reference Committees as hereinafter

provided for, and any other committees considered by him necessary to expedite the business of the Association.

#### CHAPTER V.—ELECTION OF OFFICERS

SECTION 1.—The election of officers shall be the first order of business of the House of Delegates after the reading of the minutes on the morning of the last day of the Annual Session.

SEC. 2.—All elections shall be by ballot, and a majority of the votes cast shall be necessary to elect. In case no nominee receives a majority on the first ballot, the nominee receiving the lowest number of votes shall be dropped and a new ballot taken.

SEC. 3.—Any person known to have solicited votes for or sought any office within the gift of this Association shall be ineligible for any office for two years.

SEC. 4.—The term of office, unless otherwise specified, shall be for the fiscal year following the date of election.

#### CHAPTER VI.—DUTIES OF OFFICERS

SECTION 1.—The President shall preside at all General Meetings of the Association and of the House of Delegates; shall appoint all committees not otherwise provided for; he shall deliver an annual address at such time as may be arranged by the Scientific or Program Committee, and perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the state during his term of office, and as far as practicable, shall visit by appointment the various sections of the state and assist the Councilors in building up the county societies, and in making their work more practical and useful.

SEC. 2.—The President-elect shall assist the President in the discharge of his duties. In the event of the President's death, resignation or removal, the President-elect shall succeed him in office.

SEC. 3.—The Treasurer shall give bond at the expense of the Association in such an amount as shall be required by the Council. He shall demand and receive all funds due the Association, except accounts due THE JOURNAL in the conduct of its business, together with bequests and donations. He shall pay money out of the treasury only on a written order by the President, countersigned by the Chairman of the Council. He shall present to the House of Delegates annually a report of the receipts and expenditures, and the state of the funds in his hands, and shall subject his accounts to such examination as the House of Delegates may order.

SEC. 4.—The Executive Secretary shall attend the General Meetings of the Association, and the meetings of the House of Delegates and the Council, and shall keep minutes of their respective pro-

ceedings in separate record books. He shall be Secretary of all committees of the Association, assist them in the performance of their duties and keep a record of their proceedings. He shall, under instructions from the Bureau or Committee on Publicity, issue and send to lay publications such educational articles as may be prepared and authorized for general publication, and secure and assign medical speakers to address (on invitation) lay organizations on subjects pertaining to individual or community health. He also shall, whenever requested, assist any of the component societies of the Association in securing speakers or otherwise preparing a program for special meetings; he shall at all times hold himself in readiness to advise and aid, so far as practicable, any and all officers or committees of the Association in the performance of their duties or to carry out any of the purposes or policies of the Association. He shall be custodian of all record books and papers belonging to the Association, except such as properly belong to the Treasurer, and shall keep account of and promptly turn over to the Treasurer all funds of the Association which come into his hands. He shall be bonded at the expense of the Association in such an amount as shall be required by the Council. He shall provide for the registration of the members and delegates at the Annual Session. He shall, with the cooperation of the secretaries of the component societies, keep a card-index register of all the legal practitioners of the state by counties, noting on each his status in relation to his county society, and, on request, shall transmit a copy of this list to the American Medical Association. He shall report promptly memberships and proceedings or reports of the House of Delegates, the Council, or any committees of the Association to the Editor of *THE JOURNAL* for publication. He shall aid the Councilors in the organization and improvement of the county societies and in the extension of the power and usefulness of this Association. He shall conduct the official correspondence, notifying members of meetings, officers of their election, and committees of their appointment and duties. He shall employ such assistants as may be ordered by the Council, and shall make an annual report to the House of Delegates. He shall supply each component society with the necessary blanks for making their annual reports; shall keep an account with the component societies, charging against each society its assessments, collect the same, and at once turn it over to the Treasurer. Acting with the Committee on Scientific Work and the Editor of *THE JOURNAL*, he shall prepare and issue all programs. The amount of his salary shall be fixed by the Executive Committee on approval of the Council.

SEC. 5.—The necessary expenses of the above officers incurred in the line of duty herein imposed may be allowed by the Council, but excepting the Executive Secretary, this shall not include the expense of attending the Annual Session.

## CHAPTER VII.—COUNCIL

SECTION 1.—The Council shall meet as follows: 1. Annually, in December or January. 2. On the day preceding the first day for the scientific meetings of the Annual Session of the Association. 3. On the last day of the Annual Session of the Association. 4. At such other times as necessity may require, subject to the call of the chairman, or on petition of three Councilors. It shall hold no meeting that will conflict with any meeting of the House of Delegates. It shall elect a chairman; and a clerk, who, in the absence of the Executive Secretary of the Association, shall keep a record of its proceedings. It shall, through its chairman, make an annual report to the House of Delegates. Five Councilors shall constitute a quorum for the transaction of business.

SECTION 1.—The Council shall meet as follows: 1. Annually, in December or January. 2. On the day preceding the first day for the scientific meetings of the Annual Session of the Association. 3. On the last day of the Annual Session of the Association, after the adjournment of the House of Delegates. 4. At such other times as necessity may require, subject to the call of the chairman, or on petition of three Councilors. It shall hold no meeting that will conflict with any meeting of the House of Delegates. It shall elect a chairman; and a clerk, who, in the absence of the Executive Secretary of the Association, shall keep a record of its proceedings. It shall, through its chairman, make an annual report to the House of Delegates. Five Councilors shall constitute a quorum for the transaction of business.

SEC. 2.—Each Councilor shall be organizer, peace-maker, and censor for his district. He shall visit the counties in his district at least once a year for the purpose of organizing component societies where none exist; for inquiring into the condition of the profession, and for improving and increasing the zeal of the county societies and their members. He shall make an annual report of his work and of the condition of the profession of each county in his district, the same to be published in the number of *THE JOURNAL* which is issued immediately preceding the Annual Session, and the report should be approved by the House of Delegates, with such recommendations as seem indicated. The necessary expenses incurred by such Councilor in the line of the duties herein imposed may be allowed by the Council on a properly itemized statement, but this shall not be construed to include his expense in attending the Annual Session of the Association.

SEC. 3.—The Council shall, through its officers and otherwise, give diligent attention to and foster the scientific work and spirit of the Association, and shall study and strive constantly to make each Annual Session a stepping stone to future ones of higher interest.

SEC. 4.—The Council shall, in connection with the House of Delegates, consider and advise as to the



material interests of the profession and of the public in those important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse popular information in relation thereto.

SEC. 5.—The Council shall make careful inquiry into the condition of the profession of each county in the state and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse among physicians of the same locality, and shall continue these efforts until every physician in every county of the state who can be made reputable has been brought under medical society influence.

SEC. 6.—The Council shall encourage postgraduate and research work, as well as home study, and shall endeavor to have the results utilized and intelligently discussed in the county societies.

SEC. 7.—The Council shall, upon application, provide and issue charters to county societies organized to conform to the spirit of this Constitution and By-Laws.

SEC. 8.—In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies to be designated by hyphenating the names of two or more counties so as to distinguish them from district and other classes of societies; and these societies, when organized and chartered, shall be entitled to all the privileges and representation provided herein for county societies, until such counties may be organized separately.

SEC. 9.—The Council shall be the board of censors of the Association. It shall consider all questions involving the rights and standings of members, whether in relation to other members, to the component societies, or to this Association. All questions of an ethical nature brought before the House of Delegates or the General or Section Meetings shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members of component societies on which an appeal is taken from the decision of an individual Councilor, and its decision in all such matters shall be final.

SEC. 10.—The Council shall provide for and superintend all publications of the Association, and shall have authority to appoint an editor and such assistants as it deems necessary, and fix the amounts of their salaries. The proceedings of the Council for the year shall be reported to the House of Delegates at the Annual Session, and be published in the number of THE JOURNAL which immediately precedes the Annual Session.

SEC. 11.—In the interim between the sessions of this Association the Council shall be the executive body of the Association with full power to fill

vacancies or transact any business that emergencies or the welfare of the Association may require.

SEC. 12.—The Council shall employ an Executive Secretary who need not be a physician nor a member of the Association.

SEC. 12.—Deleted. (See Article IX, new Sections 1 and 2.)

SEC. 13.—The Council shall elect a committee of five members of the Association, three of whom in consequence of their necessarily intimate relationship with the Association shall be President, President-elect, and the chairman of the Council, which shall be known as the Executive Committee.

SEC. 13.—The Council shall elect two members of the Association, who with the President, the President-elect, and the chairman of the Council, shall constitute and be known as the Executive Committee.

#### CHAPTER VIII.—STANDING COMMITTEES

SECTION 1.—The standing committees shall be as follows:

The Executive Committee.

A Committee on Arrangements.

A Committee on Scientific Work.

A Committee on Public Policy and Legislation.

A Committee on Publicity.

A Committee on Industrial and Civic Relationship.

A Committee on Medical Education and Hospitals.

A Committee on Budget.

Such committees, except the Executive Committee, which is elected by the Council, and the Committee on Budget, the membership of which is hereinafter provided for, shall be appointed by the President of the Association, and the President and Executive Secretary of the Association shall be *ex officio* members of all standing committees. The President also may appoint such other committees as may be necessary. No member of the Indiana State Medical Association shall serve as a member of two major committees in any one year.

SECTION 1.—The standing committees shall be as follows:

The Executive Committee.

A Committee on Arrangements.

A Committee on Scientific Work.

A Committee on Public Policy and Legislation.

A Committee on Publicity.

A Committee on Industrial and Civic Relationship.

A Committee on Medical Education and Hospitals.

A Committee on Budget.

A Committee on Public Relations.

Such committees, except the Executive Committee, which is elected by the Council, and the Committee on Budget, the membership of which is hereinafter provided for, shall be appointed by the President of the Association, and the President and Executive Secretary of the Association shall be

ex officio members of all standing committees. The President also may appoint such other committees as may be necessary. No member of the Indiana State Medical Association shall serve as a member of two major committees in any one year.

SEC. 2.—*The Executive Committee*, consisting of five members as heretofore provided for, shall meet regularly once a month with the Executive Secretary to plan and execute such work as may be necessary for the welfare of the Association and the conduct of the Executive Secretary's office. It shall constitute the Medical Defense Committee of the Association and shall have full authority governing all matters pertaining to the medical defense features of this Association, and shall be governed by the rules and regulations concerning such features as provided for in the By-Laws of this Constitution. It shall represent the Council during intervals between meetings of that body and shall report its doings to the Council.

SEC. 3.—*The Committee on Arrangements*, with the advice and assistance of the Executive Secretary, shall provide suitable accommodations for the meetings of the Association, including the House of Delegates, Council, and of their respective committees, the scientific and commercial exhibits, and in conjunction with the Executive Secretary shall have general charge of all the arrangements. Its chairman shall report an outline of the arrangements to the Executive Secretary of the Association for publication in THE JOURNAL and in the official program, and shall make additional announcements during the session as occasion may require. The arrangements for and the character of any and all commercial exhibits must meet with the approval of the Executive Committee of the Association.

SEC. 4.—*The Committee on Scientific Work* shall consist of three members, one to serve one year, one to serve two years, and one to serve three years, thereafter one to be appointed each year for a period of three years; the senior member to be chairman.

The President of the State Medical Association, the officers of the Sections, and the Executive Secretary are to be *ex officio* members.

Section officers shall be responsible to the Committee on Scientific Work for the Section speakers and papers.

Liaison shall be maintained between the Committee on Scientific Work and the scientific exhibitors. Thirty days previous to each Annual Session it shall prepare and issue a program announcing the order in which papers, discussions, and other business shall be presented. Such program and all announcements concerning the Annual Session shall be published in the number of THE JOURNAL of the Association that is issued just prior to the Annual Session.

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(See Chapter III, Section 2.)

SEC. 5.—*The Committee on Public Policy and Legislation* shall consist of three members, and the President and Executive Secretary of the Association. Under the direction of the House of Delegates it shall represent the Association in securing and enforcing legislation in the interest of public health, medical education, scientific medicine and the economic welfare of the medical profession. It shall keep in touch with professional and public opinion, shall endeavor to shape legislation so as to secure the best results for the whole people, and to protect the medical profession, and shall strive to organize professional influence so as to promote the general good of the community in local, state and national affairs and elections.

SEC. 6.—*The Committee on Publicity* shall consist of five members, two of which shall be the President and the Executive Secretary of the Association. It shall be responsible for the dissemination of information concerning individual and community health to the lay public through articles prepared for publication in lay publications, or for addresses or talks delivered before lay audiences under the authority of the Association, and shall in every way seek to give the lay public a better knowledge and understanding of the aims and objects of scientific medicine.

SEC. 7.—*The Committee on Industrial and Civic Relationship* shall consist of three members appointed by the President, each to serve for three years, one member to be appointed each year. The duties of the committee shall be: To study, gather facts and become intimately acquainted with all and every movement wherever and by whomsoever agitated, proposed or attempted to enact or be enacted, that has as its secret or avowed object the providing of social, commercial or industrial medical insurance for the public, civic or commercial employers of persons or for the providing of medical or surgical care to a group or groups of individuals singly or collectively, or which in any manner affects the economic and financial status of the members of this Association either individually or collectively; to represent this Association in efforts to secure greater cooperation and a mutual understanding between medical men and employers of labor or their insurance carriers con-



cerning the rendering of professional services in industrial cases and the amount and character of compensation therefor. To devise and advise, whenever necessary, intelligent action on the part of this Association upon these questions. To report annually and in writing, its findings, recommendations and information to the House of Delegates. Should occasion arise in the interval between the stated meetings of the House of Delegates and prompt action becomes imperative, the committee is to present its findings to the chairman of the Council and President who are empowered how to proceed in such emergencies by this Constitution and By-Laws.

SEC. 8.—*The Committee on Medical Education and Hospitals* shall consist of three members appointed by the President, each to serve for three years, one member to be appointed each year. The duties of this committee shall be to cooperate with the authorities of the Indiana University School of Medicine in efforts to improve the educational standards of the state as they pertain to the practice of medicine; to act in conjunction with the members of the Council in providing postgraduate clinics or teaching for the various Councilor medical districts of the state; and to select one of its own members as a delegate to the yearly Conference on Medical Education and Hospitals of the American Medical Association, and to cooperate with the corresponding Council of the American Medical Association.

SEC. 9.—*The Committee on Budget* shall consist of the officers, the retiring President and the chairman of the Council. The duty of this committee shall be to prepare a budget for the ensuing year, and all expenditures of the Association, except those otherwise provided for by the Constitution and By-Laws, shall be governed by the budget. No expense not provided for in the budget shall be incurred by any officer or committee. A committee or an officer may submit a request for funds to meet unusual expenses, which request may be granted by two-thirds vote of the Budget Committee.

SEC. 10.—*The Committee on Public Relations* shall have as its duty to act as liaison between the Indiana State Medical Association, the Indiana University School of Medicine, the Indiana Division of Public Health, and the public, to hear and investigate complaints, to gather facts, and so far as it may be in their province, to correct existing faults and incorrect information; to further cooperation, and to obtain proper and legitimate publicity through the Publicity Committee of all matters of public interest concerning the above.

#### CHAPTER IX.—REFERENCE COMMITTEES

SECTION 1.—Immediately after the organization of the House of Delegates at each Annual Session, the President shall appoint from the members of the House reference committees to serve during the session at which they are appointed. Each com-

mittee shall consist of five members, the chairman to be specified by the President. To these committees shall be referred all reports, resolutions, measures and propositions presented to the House of Delegates, except such matters as properly come before the Council, and the recommendations of these committees shall be submitted to the next meeting of the House of Delegates for acceptance in the original or modified form or for rejection.

SEC. 2.—The following reference committees are hereby constituted:

(1) A Committee on Sections and Section Work to which shall be referred all matters relating to the Sections or Section work. The members of the Committee on Scientific Work shall be members *ex officio* of this committee.

(2) A Committee on Rules and Order of Business to which shall be referred all matters regarding rules governing the action, methods of procedure and order of business of the House of Delegates.

(3) A Committee on Medical Education and Hospitals to which shall be referred all matters relating to medical education and medical colleges and hospitals. The members of the standing committee on Medical Education and Hospitals shall be members *ex officio* of this committee.

(4) A Committee on Public Policy and Legislation to which shall be referred all matters relating to state and national legislation, memorials to the legislature, to the United States Congress, or to the Governor of the state, or to the President of the United States. The members of the standing committee on Public Policy and Legislation shall be *ex officio* members of this committee.

(5) A Committee on Publicity to which shall be referred all matters relating to publicity. The members of the standing committee on Publicity shall be *ex officio* members of this committee.

(6) A Committee on Hygiene and Public Health to which shall be referred all matters relating to hygiene and public health.

(7) A Committee on Amendments to the Constitution and By-Laws to which shall be referred all proposed amendments to the Constitution and By-Laws.

(8) A Committee on Reports of Officers to which shall be referred the address of the President and the reports of the Executive Secretary, Treasurer and the Council.

(9) A Committee on Credentials to which shall be referred all questions regarding registration and the credentials of delegates.

(10) A Committee on Miscellaneous Business to which shall be referred all business not otherwise disposed of.

#### CHAPTER X.—COUNTY SOCIETIES

SECTION 1.—All county societies now in affiliation with this Association or those which may hereafter be organized in this state, which have adopted principles of organization not in conflict with this

Constitution and By-Laws, shall, on application, receive a charter from and become a component part of this Association.

SECTION 1.—All county societies now in affiliation with this Association or those which may hereafter be organized in this state, which have adopted principles of organization not in conflict with this Constitution and By-Laws, shall, on application, receive a charter from and become a component part of this Association. The acceptance or retention of this charter shall be regarded as a pledge on the part of the said component society to conduct itself in harmony with the letter and/or spirit of this Constitution and By-Laws and other rules and resolutions of this Association.

SEC. 2.—Charters shall be issued only upon approval of the Council and shall be signed by the President and Executive Secretary of this Association. The Council shall have authority to revoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

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SEC. 3.—Only one component medical society shall be chartered in any county. Where more than one county society exists, friendly overtures and concessions shall be made, with the aid of the Councilor for the district if necessary, and all of the members brought into one organization. In case of failure to unite, an appeal may be made to the Council, which shall decide what action shall be taken.

SEC. 4.—Each county society shall be judge of the qualifications of its own members, but, as such societies are the only portals to this Association and to the American Medical Association, every reputable and legally registered physician who does not practice or claim to practice, nor lend his support to, any exclusive system of medicine shall be entitled to membership. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every physician in the county to become a member.

SEC. 5.—Any physician who may feel aggrieved by the action of the society of his county in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Council, and its decision shall be final.

SEC. 6.—In hearing appeals the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a board and as individual Councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

SEC. 7.—When a member in good standing in a component society moves to another county in this

state, his name, on request, shall be transferred without cost to the roster of the county society into whose jurisdiction he moves.

SEC. 8.—A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the society in whose jurisdiction he resides.

SEC. 9.—Each component society shall have general direction of the affairs of the profession in its county, and its influence shall be constantly exerted for bettering the scientific, moral and material condition of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified and honorable physician in the county.

SEC. 10.—At some regular meeting, in advance of the Annual Session of this Association, each county society shall elect a delegate or delegates and alternates to represent it in the House of Delegates of this Association, and the secretary of the society shall send a list of such delegates and alternates to the Executive Secretary of this Association at least thirty days before the Annual Session. No one shall be entitled to a seat in the House of Delegates unless his credentials as a delegate or alternate, properly signed by the secretary and president of the county society, be presented to the Committee on Credentials at the time of the Annual Session.

SEC. 10.—At the annual business meeting for election of other officers, in advance of the Annual Session of this Association, each county society shall elect delegates and alternates to represent it in the House of Delegates of this Association, and the secretary of the society shall send a list of such delegates and alternates to the Executive Secretary of this Association annually on or before June first.

(See Chapter IV, Section 2.)

SEC. 11.—The secretary of each component society shall keep a roster of all its members and of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this state, and such other information as may be deemed necessary. In keeping such roster the secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

SEC. 12.—The fiscal year of the Association shall be from January 1 to December 31, and all assessments shall be for the fiscal year and *payable in advance*. The secretary of each component society shall forward the assessment for his society, together with the roster of officers and members and list of non-affiliated physicians of the county, to the Executive Secretary of this Association, on or before January 1 of each year, and he shall promptly report thereafter the names of any new



members elected to membership in his society, and promptly forward to the Executive Secretary of this Association the assessment for such new members. The assessment shall be the same for all members and entitle the members to all benefits, including the publications of this Association, from the time of paying the assessment to the close of the fiscal year only.

SEC. 13.—Any county society which fails to pay its assessment or make the report required by February 1 of each year shall be held suspended, and none of its members or delegates shall be permitted to receive any of the publications of the Association or participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

SEC. 14.—Each county society shall be held responsible for the faithfulness in the performance of duty on the part of its secretary in making reports and remitting dues or assessments to the Association.

SEC. 15.—Each component society shall have its own Constitution and By-Laws, not in conflict with the Constitution and By-Laws either of this Association or of the American Medical Association, a copy of which shall be filed with the Executive Secretary of this Association; and furthermore, the Executive Secretary shall be notified at once of any changes or amendments that may be made from time to time.

#### CHAPTER XI.—MISCELLANEOUS

SECTION 1.—The deliberations of this Association shall be governed by parliamentary usage as contained in Robert's Rules of Order, when not in conflict with this Constitution and By-Laws.

SEC. 2.—The Principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

#### CHAPTER XII.—MEDICAL DEFENSE

SECTION 1.—Seventy-five cents out of the annual dues of each member of the Association shall be set aside as a special fund for medical defense.

SEC. 2.—The administration of medical defense of this Association shall be intrusted to the Executive Committee, which shall constitute the Committee on Defense of the Association.

SEC. 3.—This committee shall have full authority governing all matters pertaining to the Medical Defense features of this Association; with power to employ counsel, summon and employ expert witnesses and incur such other expenses as in the judgment of the committee may be necessary in the defense of members against whom suits may be brought; provided, always, that the total expenditure in any single suit shall not exceed 25 per cent of the fund available at the time suit is incurred; and provided further that this Association shall not be liable for attorney's fees in such suits unless this committee shall have first agreed in each case with the physician sued and the attorneys repre-

senting him in regard to the terms of such employment, including the fees to be paid.

SEC. 4.—The Treasurer of the Indiana State Medical Association shall be custodian of the Defense Fund, separately kept, and shall give such additional bond as may be demanded by the Medical Defense Committee. He shall pay out money from this fund only on the signed order of the Chairman of the Executive Committee and countersigned by the President and the Chairman of the Council.

SEC. 5.—The Medical Defense Committee shall make an annual report to the House of Delegates of the cases in which it has been of service to members and furnish an account of the money received and expended, such report to be published in THE JOURNAL of the Indiana State Medical Association at the time and in the manner that reports of other committees of the Association are published. The financial report of the committee shall be submitted to and approved by the Council.

SEC. 6.—This Association shall not be liable for any damage awarded, but shall be liable only for such expenses for the legal defense of its members as may be incurred in accordance with the terms of these By-Laws.

SEC. 7.—The Association shall not undertake the defense of a member in a suit that may be brought to secure indemnity for services rendered prior to January 1, 1912, nor in any case in which the member who applies for medical defense by the Association has failed to pay his annual dues for the year in which services were rendered which are the basis of the suit; and that medical defense by the Association shall not be available to those who are delinquent, or to those who have not paid the annual dues of the Association prior to the rendering of services for which indemnity is asked. (Dues are payable on January 1, and become delinquent on February 1 of each year.) The membership card of this Association, duly signed and dated by the Executive Secretary, shall be considered the only *bona fide* evidence of payment of dues or membership in this Association.

The Indiana State Medical Association shall in no case provide medical defense against any action for malpractice against any physician unless such physician was a member of this Association in good standing at the time the services which are the basis of this suit were rendered.

SEC. 7.—The Association shall not undertake the defense of a member in a suit that may be brought to secure indemnity for services rendered prior to January 1, 1912, nor in any case in which the member who applies for medical defense by the Association has failed to pay his annual dues for the year in which services were rendered which are the basis of the suit; and medical defense by the Association shall not be available in any suit based on services rendered during any period of delinquency in the payment of dues. (Dues are payable on January 1, and become delinquent on February 1 of each year.) The membership card of

this Association, duly signed and dated by the Executive Secretary, shall be considered the only bona fide evidence of payment of dues or membership in this Association.

The Indiana State Medical Association shall in no case provide medical defense against any action for alleged malpractice against any physician unless such physician was a member of this Association in good standing at the time the services which are the basis of this suit were rendered.

SEC. 8.—A member desiring to avail himself of the services of the Committee on Medical Defense in connection with litigation brought or threatened must send to the Executive Secretary of the Association for an application blank. After completing the data concerning the case he shall submit to a local committee of his county medical society—to be composed of the President, Secretary and one other member in good standing who may be nominated by the defendant—a full statement of the question at issue, including the diagnosis and treatment of the case and the names of physicians, nurses and other persons having knowledge of the same, who may be summoned as witnesses.

SEC. 9.—The committee of the county medical society shall immediately, after an investigation of all the circumstances and facts, transmit its report, with recommendations, to the Committee on Medical Defense of this Association.

SEC. 10.—Accompanying such report from the county society, if favoring medical defense by the Association, there also must be furnished the written authority of the defendant granting to the Medical Defense Committee of this Association full power to act in his behalf, and an agreement that his case shall not be compromised or settled without the consent of a majority of the Committee on Medical Defense.

SEC. 11.—In the event that the county committee shall fail to recommend the case as one worthy of the recognition of this Association, a direct appeal may be made to the Committee on Medical Defense of this Association, whose decision shall be final.

SEC. 12.—Suits brought against the estate of a deceased member shall be defended as if that member were alive; provided that such member was in good standing in the Association at the time of his death and that services for which indemnity is asked were rendered while the deceased was a member in good standing.

SEC. 13.—Each member of the Committee on Medical Defense of this Association shall be entitled to an honorarium of \$10 per diem for services actually rendered while at home, and \$30 per diem with traveling expenses, if required to go out of town in the investigation of any case or in attendance at court, and these same fees shall be allowed to expert witnesses under similar circumstances.

SEC. 14.—Medical defense shall not be available to members living outside of the State of Indiana

at the time services were rendered for which indemnity is claimed.

SEC. 15.—The Committee on Medical Defense shall have power to adopt such other rules, not in conflict with the foregoing, as in their judgment may seem necessary.

SEC. 16.—Medical defense as provided for by this Association shall be available to members under the terms stated in these By-Laws only to defense of civil actions for malpractice.

SEC. 16.—Medical defense as provided for by this Association shall be available to members under the terms stated in these By-Laws only to defense of civil actions for alleged malpractice, and shall not be available if such alleged malpractice occurred when the member was under the influence of any intoxicant or narcotic while rendering the service in question.

#### CHAPTER XIII.—DIVISION OF FEES

This Association does not countenance or tolerate fee-splitting, division of fees, or commission paying directly or indirectly, and any member found guilty shall be expelled from membership.

#### CHAPTER XIV.—AMENDMENTS

SECTION 1.—These By-Laws may be amended at any Annual Session by a majority vote of all the delegates present at that session, after the amendment has lain on the table for one day.

SEC. 2.—Upon the adoption of this Constitution and By-Laws, all previous Constitutions and By-Laws are hereby repealed.

#### STANDING RESOLUTIONS

JOURNAL, October, 1929, Page 454.

*Resolved*, That the Committee on Publicity of the Indiana State Medical Association be requested to establish Archives of Medical History of Indiana and that this committee recommend to the House of Delegates the name of a member of the Indiana State Medical Association as Historian, and that the appointment of such Historian shall be permanent when so elected by the House of Delegates until removed by death or has become incapacitated from other causes and that, thereafter, when a vacancy occurs in this office, it shall be filled by nomination by the President of the Association and election by the House of Delegates.

JOURNAL, November, 1933, Page 582.

*Resolved*, That no member of the Indiana State Medical Association may be allied with an organization whose purpose is to supply medical service to a group of individuals, unless the said organization is approved by the Executive Committee of the Indiana State Medical Association.

#### COUNTY SOCIETY REPORTS

BARTHOLOMEW COUNTY MEDICAL SOCIETY met in Columbus, August second, for the purpose of discussing the relationship of the medical profession to relief work.

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CARROLL COUNTY MEDICAL SOCIETY members met August tenth, at Bringham, with Dr. O. N. Torian, Indianapolis, as principal speaker. Dr. Torian's subject was "Childhood Anemia."



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## ORIGINAL ARTICLES

### GRANULOCYTOPENIA\*

REPORT OF TWO CASES

O. R. SPIGLER, M. D.

J. F. SPIGLER, M. D.

TERRE HAUTE

A marked leukopenia has always been regarded as a serious prognostic sign and looked upon with alarm. It is only within recent years that one type of granulopenia has been considered as a distinct clinical entity. At first, every observer gave it a different name, according to his own view of it, so that we have it known by such terms as agranulocytosis, agranulocythemia, agranulocytic angina, malignant neutropenia, granulopenia, granulocytopenia, sepsis agranulocytica, mucositis necroticans agranulocytica, angina necrotica, malignant leukopenia, and idiopathic neutropenia. Recently the terminology has settled down to the two terms of malignant neutropenia and granulocytopenia, a condition characterized by a marked diminution or even absence of the polymorphonuclear neutrophiles.

This condition was first described in 1922 by a German named Schultz, who reported six cases, all of which were very similar in their symptomatology and all of which terminated fatally. Until 1927, very few additional cases were reported, but since that time similar cases have been seen in increasing numbers in the United States. It is generally believed that primary granulocytopenia is a relatively new clinical syndrome for it is hard to believe that, if it had existed to any great extent prior to 1922, it could have been overlooked, since the blood picture is so characteristic and the disease runs such a rapid course.

There appear to be two different types of granulocytopenia: one is a chronic and insidious form; the other is an acute and fulminating type. Our case reports concern one of each type.

\* Presented before the Second District Medical Society at Sullivan, June, 1934.

In the acute type, the disease is characterized by a sudden, rapidly-developing prostration with high fever, chilliness, malaise, and ulcerations more commonly in the mouth, throat and intestinal tract. The weakness, marked prostration, and toxic appearance are out of all proportion to the few physical signs. There may be rectal or vaginal symptoms as a result of ulcerations in these regions. At first it was felt that the ulcerations of the mouth and throat, since they characteristically occur in this condition, were the cause of the disease, but it is now definitely proved that they are the result of it.

In the chronic type, the symptoms are much the same, although there is a history of increasing weakness and general disability over a prolonged period of time before an acute attack is superimposed. A blood count during the chronic stage would probably show a gradually increasing neutropenia. The chronic type is frequently the result of a chronic infection. The prognosis and the treatment are the same in both types.

There has been a very serious search for some specific organism, but cultures of the ulcerations have revealed a variety of micro-organisms including Vincent's spirilli, diphtheria bacilli, bacilli pyocyaneus, staphylococci, all forms of streptococci, and many others. No organism has thus far been found to occur constantly, or even frequently, in the clinical cases. Occasionally, organisms isolated from human cases have produced leukopenia with granulocytopenia in experimental animals, but not in a manner comparable to the syndrome as seen in human beings.

With the foregoing history, the diagnosis is made by the blood count, of which the white count is most important. There is invariably a marked drop in the white count to between 2000 and 200 cells per c.m.m. Examination of the differential white cell count discloses that this drop is chiefly due to a diminution or absence of the polymorphonuclear neutrophiles. They are characteristically below twenty per cent. There may or may not be a drop in the absolute number of lymphocytes. In most of the cases there is no remarkable change in the hemoglobin, red cells, or platelets, although in

long standing cases there may be an associated anemia of the secondary type. Fitzhugh has found that in several cases which he studied there is a normal sedimentation rate of the red cells in spite of the high temperature. This is a rather interesting finding and would merit further investigation. Improvement in symptoms, local and general, is invariably preceded or accompanied by a rising blood count.

This condition may be seen at any age, reports having been given of cases as young as four months and as old as seventy-four years. It seems to be more common in the fifth and sixth decades of life and is more prevalent in women than men, approximately eighty per cent of the cases having occurred in women. The condition shows no evidence of being either contagious or familial.

In studying the pathology, there are two changes of note: the ulceration of the mucous membranes and the change in the bone marrow. Ulcerations are very characteristic and are found most often in the mouth and throat, but may occur anywhere. They are very often seen in the rectum and vagina during life, where they frequently give rise to distressing symptoms; they appear in the intestines at necropsy. Microscopic sections of these ulcerations show an absence of the usual inflammatory reaction at the border of the lesion. These ulcerations are not caused by any specific organism but are rather the result of a lack or even absence of resistance of the tissues to any bacterial infection. The finding of Vincent's spirilli and diphtheria bacilli in the ulcerations of the mouth and throat have led to the employment of arsphenamine and diphtheria anti-toxin. It is generally known that arsphenamine is quite depressing to the bone marrow so that any such form of treatment is far from rational. Many cases will show characteristic areas of gangrene of portions of the skin, surrounded by red and indurated areas. These very seldom break down to form pus but if they do it is a favorable prognostic sign. At times, abscess formation may take place following the rise of the white count. The complicating lesions are usually present before they break down to form abscesses, but in the absence of the leucocytes the usual inflammatory response could not take place.

The picture of the bone marrow during an attack is quite characteristic. In the majority of cases there is no change in the erythropoiesis and any anemia is undoubtedly due to an increased destruction of the red cells because of the lowered vitality of the patient. Similarly there is little or no change to be seen in the formation of lymphocytes and platelets. The striking changes are found in the histologic evidence of a severe injury to the granulopoietic tissue. There is a marked diminution or even absence of the neutrophils and young forms and whatever forms are seen are frequently distorted.

It is very easy to understand that in a patient with a marked lowering or even absence of the

major defenses of the body against infection, any complication may occur. This is frequently the case and although the neutrophils may increase in the blood and even go above normal, the patient may succumb to an overwhelming infection which was incurred while they were in this depressed state. Bronchopneumonia is a not uncommon sequela and cause of death.

Granulocytopenia should not be confused with other conditions which cause a marked granulopenia. As is well known, various diseases will characteristically show a low white count—to mention only a few, influenza, typhoid and some of the exanthemata. The mechanism of this leukopenia is not clearly understood but it is felt that it may be a foreign protein reaction to those specific organisms. There is also the granulopenia of severe sepsis which usually is rather easily recognized. It is well known that arsphenamine and benzene exert a toxic action on the bone marrow. X-ray and radium may also result in a lowering of the white cells because of their action on the bone marrow. Confusion frequently arises in the differentiation of granulocytopenia from aleukemic and aplastic anemia. At times it may be difficult or even impossible to differentiate the aleukemic phase of leukemia, except by the subsequent course and the very marked enlargement of the spleen and lymph glands in leukemia. Aplastic anemia should not be confused with granulocytopenia because it characteristically shows a depression of all portions of the bone marrow which results in a lowering of the red cells and platelet counts also.

In the line of treatment, many remedies have been suggested and tried, only to fall by the wayside because of inadequate results. It is rather difficult to properly evaluate the efficacy of a given preparation because of the comparative rarity of the disease and because approximately eighty per cent of the cases terminate fatally in spite of any and all treatment. Intravenous gentian violet and acriflavine have had their vogue and are of no value except possibly in cases of associated blood stream infection. The use of arsphenamine has been mentioned earlier in the paper and is undoubtedly to be condemned. Extract of bone marrow has been given with rather uncertain results. Some authorities have tried injections of non-specific protein in an effort to stimulate the bone marrow. Although large doses of x-ray tend to depress the bone marrow, it has always been believed that light doses stimulate it, so this has been used; however, during the past few years it has lost favor. Countless transfusions have been given and theoretically should be of value. Our experience confirms the reports of others in that we obtained absolutely no change following transfusions. They should do no harm and may be used as a matter of routine. It is generally considered that the only preparation of constant value in the treatment of granulocytopenia is the injection of pentose nucleotide K. 98. This is on the



market under the name of "Pentnucleotide" prepared by Smith, Kline and French Laboratories of Philadelphia. It comes in 10 c.c. ampoules and one ampoule is given intramuscularly morning and night until there is a definite rise in the white count, and then it is given once a day until the blood count has been normal for three days. Occasionally there is a toxic reaction consisting of dyspnea, precordial distress, brachycardia, sweating and vomiting, but there is no report of a reaction terminating fatally. There is no improvement from the use of pentnucleotide until the fifth day following its administration. Since improvement almost invariably occurs on the fifth day after beginning pentnucleotide therapy, with no regard to the previous duration of the disease, it is felt that this preparation may be specific. Jackson, Parker and Taylor<sup>6</sup> have collected sixty-nine cases that were treated with pentnucleotide and report a mortality rate of only twenty-six per cent. This report has so far been the best in the literature. It must be kept in mind that some cases will have a spontaneous recovery. The general care is of course very important and consists of careful nursing attention, good nourishment, an abundance of fluids, and mild antiseptic treatment of the ulcerations. Surgical treatment of any gangrenous areas of the skin is contra-indicated unless there is formation of pus. Improvement in temperature and clinical symptoms follows in a day or so after a rise in the white cells.

#### CASE REPORTS

*Case 1.* F. F., white, female, aged sixty, was admitted to the hospital February thirteenth, with a chief complaint of a sore thumb, weakness and malaise.

Two and one-half weeks before admission, her right thumb became swollen, red and tender. On February fourth, she sought medical attention and her thumb was incised. It very slowly improved but she began to feel worse generally. Since she lived in the country and it was difficult for her to get in for treatments and because of the increasing weakness and general disability, she decided to go to the hospital for treatment.

The patient's previous history was essentially negative except for the statement that she had grown progressively weaker during the past four years. In 1931 she had a hemorrhoidectomy at which time the white count was 3,500; no differential count was made.

On admission to the hospital her laboratory report was as follows: hemoglobin 72%; white blood cells, 1,820; neutrophils 20%; lymphocytes, 80%. The patient was given two drams of liquid bone marrow three times daily. During her stay in the hospital her temperature ranged from 98 in the morning to 100 in the evening. The infection of her thumb progressed satisfactorily. On February 17, her laboratory report showed white blood cells 1,400; neutrophils 12%; lymphocytes 88%. On

February 19, white blood cells 2,000; neutrophils 7%, lymphocytes 93%.

At this time, for economic reasons, she was transferred to a private home in the city. For the next nine days the thumb showed a steady improvement although she became worse generally. The temperature rose until it reached 103 to 104 and she became slightly irrational and disoriented. Three days before re-admission to the hospital on February 28, she began to develop a red area in the upper, outer quadrant of the right breast. Upon re-admission, the white blood cells were 1,200, neutrophils 22%, lymphocytes 78%. On March 1, she was given a 500 c.c. blood transfusion and on March 2 her white blood cells were 1,200. In the blood smear only three polymorphonuclears were found. On March 3 she was given another 500 c.c. blood transfusion and on March 5 the white blood cells were 1,320, neutrophils 10%, lymphocytes 90%. From the time of her re-admission on February 28 until her death on March 15, the infection of the thumb cleared up completely while the red area in her breast slowly spread until it extended from the midline in front to the midline in back and developed a gangrenous area in the center two inches in diameter. Ten days before her death her gums became quite swollen and red and multiple ulcerations of the buccal mucous membrane and the throat developed. Her temperature ranged between 100 and 104. She was given liquid bone marrow and Parke Davis' hemo-protein intramuscularly. Death occurred March 15.

At autopsy the gangrenous area of the skin, as well as the ulcerations previously mentioned, were observed. The rest of the autopsy was essentially negative except for the spleen and the bone marrow of the rib. The spleen was normal in size and had a markedly red, congested appearance and was extremely friable. The bone marrow was extremely red. Microscopic section of the spleen showed it to be hemorrhagic and degenerate in character. Examination of the bone marrow of the rib showed many erythrocytes but no myelocytes or neutrophils were demonstrable.

*Case 2.* M. A., a colored female, aged fifty-one, was admitted to the hospital April thirteenth, in a semi-conscious, delirious condition with a very high fever.

Her previous health had been good, with the exception of a neuralgia of the side of the face which had been present for the previous two and one-half weeks. During this two and one-half weeks she had taken approximately eighty to one hundred grains of amidopyrine combined with codeine and morphine for the pain. Thirty-six hours before admission, when she went to bed in the evening she told her husband she was not feeling very well and the next morning she informed her husband that she was unable to work. That morning her husband noticed that she had a slight bowel movement in bed, to which he attached no importance.

She stayed in bed the remainder of the day and was apparently in a semi-conscious condition. It was not until evening that a physician was summoned and at that time it was found that she was semi-conscious, delirious, and hardly able to respond to questioning.

Physical examination was entirely negative except for a temperature of 106 degrees.

On admission to the hospital it was discovered that she had 1000 white blood cells, with 8% neutrophils, and 90% lymphocytes. Spinal puncture and examination of the fluid was negative. Without any specific medication, the next day her temperature fell to 102 and her laboratory report was as follows: hemoglobin 75%; red blood cells 4,600,000; white blood cells 2,000; neutrophils 47%; lymphocytes 53%. Three days after admission a right-sided cervical adenitis was noticed and the throat became red and inflamed. The gums were red and spongy. Smears were negative for Vincent's organism and positive for streptococci.

She continued to show general improvement until April 21, at which time she was quite rational and had a normal temperature, although she complained of weakness. At that time we found her white blood cells 13,400, neutrophils 73%, lymphocytes 27%. Following this, she began to grow steadily worse and became very sluggish mentally and quite stuporous, with incontinence of feces and urine. She refused all nourishment and her temperature rose again to 102. Physical examination during this period showed an improvement of the adenitis as well as the throat and gums. Her reflexes were normal with the exception of her pupillary reaction which was sluggish. On April 24, her laboratory report was hemoglobin 75%, red blood cells 4,400,000, white blood cells 17,140, neutrophils 92%, lymphocytes 8%, and on April 27, the day of her death, white blood cells 39,300, neutrophils 100%. Throughout her stay in the hospital the urinalysis showed one plus to four plus albumen and four plus white cells. On the day before her death she was given a blood transfusion of 500 c.c. for the purpose of combating infection and toxemia.

Autopsy revealed a moderate cervical enlargement on the right side. The spleen and bone marrow were hyperemic. Otherwise the organs were grossly normal. Microscopically the spleen was hemorrhagic and the bone marrow fibrous in character and also hemorrhagic. The left kidney showed chronic pyonephrosis.

#### COMMENT

The two cases presented here are different as to onset and course.

The first case had probably been coming on for some time as evidenced by the weakness and malaise. We have a record of a leukopenia three years previous to this illness. Her course was a downward one with little or no improvement and

at autopsy the bone marrow showed marked degeneration of the granulopoietic tissue.

The second case showed a very abrupt onset following the ingestion of amidopyrine with a subsequent clinical and hematological improvement. We were unable to obtain an autopsy of the skull but it is our opinion, from the clinical findings, that she died of an encephalitis incurred during her period of lowered resistance.

Until recently, there was no known predisposing cause, although many were suggested. During the past six months many observers have noted that an attack is frequently preceded by the ingestion of amidopyrine, and members of the barbituric acid derivatives. Hoffman, Butt and Hickey<sup>5</sup> report twelve cases following the use of amidopyrine, and one following the use of dinitrophenol. Watkins reports twenty-four cases at the Mayo Clinic following the use of amidopyrine. Madison and Squier<sup>6</sup> report fourteen cases following the use of some form of amidopyrine over a period of from four days to ten months. One of their cases had a recurrence after taking two capsules of amytal compound, which contains seven grains of amidopyrine, no recurrence after taking three grains of amytal, and another recurrence after taking five grains of amidopyrine alone. Kracke,<sup>7,8</sup> in 1932, was able to induce the characteristic blood picture in rabbits with small subcutaneous injections of benzene, ortho-oxybenzoic acid or hydroquinone. The common factor in benzene, ortho-oxybenzoic acid, hydroquinone, arsphenamine, amidopyrine, and dinitrophenol is the benzene ring. It is believed that these patients, following the ingestion of a preparation containing the benzene ring, develop a sensitivity to it which depresses the granulopoietic tissue. Once this sensitivity is developed, it is maintained and this fact will probably account for many of the recurrences seen in this condition.

The granulopoietic tissue in the adult is located in the red marrow. The proportion of the erythropoietic to the granulopoietic tissue, as well as the proportion of the different levels of maturation within the two groups, is relatively constant under normal conditions. In granulocytopenia, it is found that the erythropoietic tissue is essentially normal while there is a marked decrease and at times an absence of not only the neutrophils but also the myelocytes and myeloblasts. There is a specific substance in the liver which has been found to be a maturation factor in the formation of erythrocytes, lack of which causes pernicious anemia. There must be a similar maturation factor for granulocytes, lack of this factor being the cause of this form of granulopenia.

The period of rapid increase of granulocytopenia coincides with the increase of drugs containing amidopyrine. Whether the presence of a barbiturate results in a synergistic action, or otherwise influences the effect of the amidopyrine remains to be developed. We believe the bone marrow and blood changes in primary granulocytopenia



are the result of the repeated administration of certain drugs to which the individual has developed hypersensitivity and that the clinical manifestations result from the bacterial invasion of the tissues, made possible by the continued granulopenia.

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## SALIVARY CALCULUS

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Salivary calculus, or sialolithiasis, is a formation of stone within the salivary ducts or glands, characterized by symptoms of recurrent obstruction to the flow of saliva, and by various degrees of infection of the duct and gland. Calculi may be single or multiple, varying in size from that of a grain of sand to one or two inches in diameter. Hulke, quoted by Patterson,<sup>1</sup> reported a stone weighing as much as sixty-seven grams. They are mostly irregular in shape, because of erosions produced by the circumventing salivary stream forcing its way around the stone, but they may have regular geometric outlines, and when there are multiple stones they are usually faceted. The composition of salivary calculi varies in the proportion of salts and organic matter. Calcium phosphate is said to be the principal salt deposited, about sixty-five per cent, calcium carbonate about six per cent, organic matter about twenty-five per cent or more. Occasionally urates are deposited. The greater the cal-

cium content, the denser the x-ray shadow is shown.

There are many theories regarding the genesis of calculi. Inflammatory processes of the glands or their ducts play an important role. Infection seems to alter the physico-chemical constitution of the salivary secretion, thereby favoring deposit of salts, while at the same time other products of inflammation such as tissue detritus, thickened mucus, pus and bacterial bodies, help to form a nucleus upon which the precipitated salts may deposit. Foreign bodies in the duct, such as tooth-brush bristles, bits of tartar, etc., have been found occasionally to result in stone formation. Becker<sup>2</sup> states that the stones usually originate in the glands and are propelled forward through the salivary current, lodging in the salivary ducts, where they become enlarged through deposits of bacteria and other deposits. The leptothrix and actinomyces have been held by some as causative factors, but it is more generally agreed that any bacterial infection may be responsible for calculus formation. Arthritic diathesis and mercurialization have been mentioned as causative factors. Predisposing causes, according to Bonnet,<sup>3</sup> are those which augment the virulence of the buccal organisms, defective oral hygiene, general and local disease, salivary stasis due to thickened mucus or pus in the ducts, and any cause tending to modify the chemical reaction (p. h.) and the constituency of the saliva.

The submaxillary gland and Wharton's duct are most frequently the site of calculi, while the parotid gland and Stenson's duct are affected less frequently, the proportion being about ten to one. The stones are usually found in the ducts and rarely in the glands. While this condition would appear to be rare, few cases being reported by most writers, it is probably common and frequently remains undiagnosed. Ivy and Curtis<sup>2</sup> have reported a series of seventy-three cases during a period of eleven years, by far the largest group reported. In this group, sixty-six were connected with the submaxillary gland or duct, and seven with the parotid. Forty-seven occurred in males and nineteen in females, a proportion of 2½ to 1. The x-ray revealed the stones in forty-four of sixty-six cases, and twenty-two were demonstrated clinically. The youngest in age was sixteen; the oldest seventy-nine years. A larger number occurred in the third decade than in any other.

The pathologic changes produced by the presence of a calculus vary with the degree of obstruction and the severity of the infection. In severe cases, the gland may be destroyed by the inflammatory process, while in mild cases, the gland resumes its normal appearance and function following the removal of the calculus. At times, salivary fistulae result, opening either into the buccal cavity or onto the skin. There may be an associated adenopathy of the lymph glands, at times resembling Ludwig's angina. The location of the great majority of the stones is in Wharton's duct in the floor of the mouth, close to its connection with the gland. They

are usually imbedded and grown into the tissues and are hard to dislodge.

Obstruction is seldom complete, and pressure on the gland causes saliva or pus to flow out of the opening of the duct. The submaxillary duct, or Wharton's duct, opens at the side of the frenum of the tongue, and Stenson's, or the parotid duct, opens above and opposite the second molar.

Clinically, this condition is characterized by symptoms and signs of obstruction, tumefaction, and infection. One of the first symptoms noted is salivary colic. A gustatory sensation is sufficient to produce it. The patient, on eating something sour which normally stimulates the flow of saliva, observes a tumefaction of the affected salivary gland, and experiences sharp lancinating pains in the region of the affected gland and duct. Usually the patient has learned to get some measure of relief by pressing on the swollen gland and forcing the saliva through the obstructed duct. These symptoms may be so mild as to escape notice. As the stone grows larger and the obstruction becomes more pronounced, salivary colic becomes more distressing. One of my patients was so annoyed by this symptom that she dreaded the coming of mealtime, and avoided dinners and other social functions. The attacks of salivary colic and tumefaction of the gland involved tend to become more and more frequent until they are practically constant. Then the patient usually consults a physician, and in many cases is told that he has a bad molar or infection of the lymph glands. Numerous cases reported give a history of repeated attacks over periods of many years.

Sometimes the first symptom may be a feeling of a small tumor in the duct or gland causing but little discomfort or pain until the obstruction or infection becomes more pronounced. The swelling in the duct is felt at all times, but the gland enlarges mostly at mealtime. The gland is nearly always free and unattached to the overlying skin or the underlying maxillary bone, although when the infection is severe and inflammation is extensive, particularly in cases where the calculi are in the gland, the gland may become adherent, the whole area may be swollen, edematous or indurated, the jaws may be locked, the neighboring lymphatics swollen, pus may exude from the opening in the duct or from internal or external fistulae, and the clinical picture may resemble Ludwig's angina or phlegmon.

Since in most cases the stone lies in Wharton's duct, its location is indicated by palpating a tender, hard nodule in the floor of the mouth lateral to the tongue. External pressure on the submaxillary gland yields a flow of saliva at the opening of the duct at the side of the frenum of the tongue, and if infection is marked, pus is extruded through the inflamed opening. At times a small calculus may show at this opening. Spontaneous expulsion of calculi often has been reported, either through

the duct opening or through a fistulous opening in the mouth or to the external surface.

In calculi of the parotid gland or in Stenson's duct, the symptoms differ only in location from those of the submaxillary gland and duct. There is usually a painful external swelling over the region of the gland, which recurs at intervals with relation to eating. Pus may exude from the opening in Stenson's duct.

The diagnosis of salivary lithiasis is easy when the stone may be palpated through the mouth, or when demonstrated by the x-ray. Errors in diagnosis occur mostly when the symptoms are mild and recur at infrequent intervals. In one of my own cases the history of obstructive symptoms dates back about twenty years. The mere existence of chronic adenitis should suggest the possibility of lithiasis. Recurrent swelling in the region of the salivary gland, especially if associated with salivary colic or discomfort at mealtime, suggests the diagnosis of obstruction and a diligent search for calculi should be made. If exploration with the index finger reveals a nodule or tumefaction along the course of the duct, the presence of calculus is almost certain. If the x-ray film shows a shadow in this region, the diagnosis is certain. Exploration of the duct with a fine silver probe or with a filiform bougie or lacrymal duct dilator indicates the point of obstruction, and if the point of the instrument encounters a dense body, the hardness is transmitted from the instrument to the fingers. The point of a fine, long needle may be thrust through the mucous membrane in the mouth, the swollen area explored, and the stone thus detected.

If pus exudes or is expressed through the duct opening on external pressure over the gland, it indicates infection. When infection is severe, the whole area may become swollen, edematous, or indurated, and the neighboring lymphatics may be swollen as well.

When the stone is located in the gland, the duct may be free and unobstructed. In one of my own cases, three calculi were removed from the submaxillary duct, but one stone still remains in the gland, requiring extirpation.

The most common mistakes in diagnosis are made either when the symptoms are too indefinite in the early stages of lithiasis, or when the infective process is so extensive as to resemble more serious conditions such as Ludwig's angina, phlegmon, epithelioma of the tongue, tuberculosis, actinomycosis, adenopathy, periostitis, tumor or carcinoma of the jaw, or cellulitis of dental origin.

A careful history is most important in differentiating salivary lithiasis from the above conditions. Repeated attacks of swelling and salivary colic, together with the presence of a nodule in the course of the duct, are pathognomonic of lithiasis. Furthermore, the nodule in the duct or in the swollen gland usually is not adherent to the bone or skin, and the gland is usually soft and yielding to pressure. Ranula is often confused with submaxillary



gland obstruction. It is a soft swelling in the floor of the mouth containing a muco-gelatinous material and has no connection with the submaxillary duct.

The x-ray examination is most important in differential diagnosis. The technique varies with the location of the stone. Dental films placed in the occlusal plane as far back in the mouth as possible will show stones in Wharton's duct if the rays are directed from under the chin. A lateral extra-oral film is necessary to show stones in the submaxillary gland and the first part of the duct. The duct and gland may be injected with lipiodine and then the x-ray film will show the outline of the gland and duct. The sublingual gland and duct which have a common outlet with Wharton's duct will then also be outlined.

When a diagnosis of stone in the salivary duct has been made, the treatment is removal. This is accomplished through a longitudinal incision over the calculus, under local anesthesia, being careful not to injure the lingual nerve. The stone is located, pried from its bed, and then removed with forceps. A pair of Allis forceps or a traction suture on the duct behind the calculus help greatly in the operation. If there is much infection, a drain may be left in. Ordinarily, sufficient drainage is achieved by leaving the wound open. In clean cases one or two sutures may be used to approximate the tissues. If a small stone lies close to the meatus of the duct, a meatotomy may be sufficient to relieve the obstruction.

If the stone is in the submaxillary gland, and the gland has been seriously damaged by infection, the whole gland should be removed through an external incision, one inch below and parallel to the ramus of the lower jaw. The facial artery and veins and branches of the facial nerve should be spared if possible. The submaxillary ganglion should not be damaged.

If there are stones in the submaxillary gland and also in the duct, they should be dealt with separately, as suggested by Maurel<sup>5</sup>, the gland calculi through an external incision, and the duct calculi through an incision in the mouth.

Parotid stones, if in the duct, are removed through an incision in the mouth. If the calculus is encrusted and imbedded in the gland, it may be removed through external incision. Extirpation of the parotid gland is difficult and the facial nerve is almost invariably injured during its removal, which usually is not advisable unless there are multiple calculi in the gland causing serious manifestations. Bsteh<sup>4</sup> recommends roentgen irradiation for all cases in which operative removal of the stones is impossible, and also as an after treatment following operation where the gland has been seriously damaged and there is danger of fistula. It is claimed that conditions for healing are materially enhanced by reducing the secretions through irradiation.

One of the possible complications following removal of stone from the duct is stenosis, which

may require dilatation or cutting into the duct and establishing a salivary fistula in the mouth beyond the stenosed portion of the duct.

#### COMMENTS

Salivary calculus is probably not as uncommon as may be supposed, and it is well to consider its possibility in all inflammatory conditions in the region of the salivary glands or ducts, particularly if there is recurrence of swelling of the gland, salivary colic, or symptoms suggesting obstruction to the flow of saliva. The phenomenon of calculus formation in the human organism is quite common, particularly in the secretory glands or their ducts. Infection is generally believed to be the most important factor in their genesis, favoring the formation of a nucleus as well as an altered state of the secretion, with subsequent precipitation of the normally dissolved and suspended constituents which then deposit upon the nucleus, forming the layer-like structure of a calculus.

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318 Bankers Trust Bldg.

### HEMORRHOIDECTOMY VERSUS OFFICE TREATMENTS

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It is becoming increasingly important for physicians to know the relative values of the surgical removal and the chemical and electrical treatments of hemorrhoids. A summary of the three methods will be given, with brief technic, and an attempt will be made to evaluate the methods. The value placed upon the different technics will depend upon whether the appraiser is a general surgeon or a specialist in diseases of the rectum. Internal hemorrhoids alone are under consideration.

I cannot better state the position of the specialist in rectal diseases than by quoting from the chairman's address, given by Curtice Rosser<sup>1</sup> before the section on Gastro-Enterology and Proctology at the Milwaukee session of the American Medical Association in June 1933. He said, "Proctology, a field long practically abandoned by the general profession to the itinerant and the irregular, has been in recent years in large measure reclaimed to

orthodox medicine through increasing realization of its import in the general medical scheme, by the evolution of undergraduate instruction in anorectal disorders, and from a definite demand on the part of general practitioners that disorders so widespread in their clientele have the benefit of careful and scientific consideration.

"Certain very definite responsibilities arose from the novel renaissance as an orthodox specialty of a hitherto neglected phase of medicine. Accurate diagnosis became essential and the Hanes position, electrically lighted colonoscope and the perfected barium ray have made it possible. From the general surgeon has been appropriated a rational operative technic which he himself refused to apply to this one field—comprising proper exposure, fortunately facilitated by the new block anesthetics, complete but careful dissection of diseased tissue with whatever instrument would be appropriate in any other body locality, hemostasis with the absorbable suture or coagulating current of today rather than the cautery of another era, and the same attention to the postoperative wound granted to similar wounds in distant portions of the body.

"Proctologic surgery has thus rightly concerned itself with the ceremonies associated with the art of surgery, but its future progress will be indexed by its solution of questions connected with the science as well as the craft of our domain."

#### ADVERTISERS

The fear of rectal surgery on the part of the laity has been caused largely by the untruths which have been broadcast by the advertising proctologists. The average layman is attracted by the "guarantees" of the advertiser, just as he is attracted by the advertising of the bucket shops. After he has read the literature of the quacks, usually containing flagrant criticism of honest physicians, he begins to feel that perhaps his conscientious and honorable family physician is misleading him. If he is warned by the physician and told of the wholly inadequate training of the quack, he immediately surmises that the physician is envious, and fails to realize that the quack avoids surgery because of his incapability of doing it.

#### REASONS FOR DIVERSIFIED METHODS

Aside from the necessity of adapting the method to the patient's needs, there are several other reasons for the various methods of taking care of hemorrhoids. The following reasons, with no attempt made to give them in order of their importance, are cited:

1. For years, irregular practitioners have advertised in the newspapers and elsewhere that they treat rectal diseases without pain, without surgery and without loss of time. They stress the "pain following surgery" and are able to convince some people that they are right.

2. In some patients, surgery is contra-indicated.

3. Individual physicians use the method with which they obtain best results.

4. The inability of some physicians to do surgery forces them to resort to various medical treatments.

5. The patient may have a preference as to the type of treatment employed.

#### ANESTHESIA

With the diversity of operative procedures that we have at present, every surgeon can find a technic suitable to his needs in dealing with hemorrhoids. Either sacral block or spinal anesthesia is preferred. As suggested by Edward G. Martin,<sup>2</sup> very small doses of novocaine crystals dissolved in spinal fluid and injected into the fourth lumbar interspace give very good anesthesia of the anorectal region. I have done a number of hemorrhoidectomies under a spinal anesthesia produced by twenty-five milligrams of novocaine crystals dissolved in twelve to fifteen drops of spinal fluid. This small amount or even fifty milligrams is probably as safe an anesthesia as can be devised. Fifty milligrams is ordinarily employed. The manufacturers do not supply twenty-five milligram ampules. Dr. Martin rarely uses ephedrine or adrenalin to support the blood pressure.

The safety of spinal anesthesia as compared to ether is discussed by H. L. Foss,<sup>3</sup> and a very good treatise on the causes of success and failure in spinal anesthesia was given recently by C. S. Baker.<sup>4</sup>

#### SURGICAL CONSIDERATIONS

Proctologists have so refined the technic of rectal surgery that a hemorrhoidectomy today can offer the patient with hemorrhoids a quick, safe, and relatively painless method of getting rid of his ailment. Office treatments, used in uncomplicated hemorrhoids of either the first or second degree, will produce a satisfactory result, but, if the patient is to be kept ambulant, many weeks will be required to complete the work.

The ligature method, with its numerous modifications, is the operation of choice. Pennington says that the origin of the method is lost in the past, but that William Salmon, of London, generally is credited with devising the present method in the early nineteenth century. The clamp and cautery operation, originated by Cusack of Dublin in 1846, now is practically obsolete among proctologists, and the same is true of the Whitehead operation.

Various modifications of the ligature operation were devised to take care of certain situations. L. J. Hirschman<sup>5</sup> describes a bloodless operation which is applicable in poor risks. He prefers local anesthesia and inserts a ligature carrier with number two catgut through the base of the hemorrhoid. This is tied, but the hemorrhoid is not removed until several weeks later. The pain and swelling resulting from the tying are treated



symptomatically. The method is suitable for desperate anemia cases. Where haste is not required, the hemorrhoid is dissected free, after the ligature is applied, and excised. L. A. Buie<sup>6</sup> describes an hemorrhoidectomy of the amputative type. He prefers sacral block anesthesia and uses the method in the excessively large hemorrhoids with perianal redundancy or prolapse. It is a rather complicated procedure and requires the amputation of considerable tissue and extensive suturing. The immediate cosmetic effect is good, but unless it is possible to carry out intensive postoperative care, the operation should not be attempted. The operation I prefer is the one described by W. A. Fansler<sup>7</sup> before the American Proctologic Society in Philadelphia in 1931. It is described as an anatomical method of hemorrhoidectomy, and is adaptable to all types of internal hemorrhoids, excepting the excessively large ones with considerable redundant perianal skin, for which he has described a new operation.<sup>8</sup> To carry out the anatomical method, a Fansler operative speculum and a long needle holder are required. The speculum is a very useful instrument, for it can be used in many different conditions such as polyps, crypts, papillae, and fistulae. Block anesthesia, either sacral or spinal, should be employed. Either the Sims or the ventral position may be assumed. After the muscle is relaxed, the speculum is inserted and the obturator removed. The hemorrhoid falls into the slot. A plain catgut suture is passed through the base of the hemorrhoid and tied. Dissection is begun at the lowermost point, usually well outside the anus, and carried up to within a quarter of an inch of the suture. The hemorrhoid then is excised and other veins are destroyed by lifting up the margins of the mucosa and snipping the veins with sharp-pointed scissors. If additional bleeding vessels are encountered, they are ligated. This procedure is continued around the rectum, the speculum taking care of approximately one quadrant. After the internal work is finished and the speculum removed, the external hemorrhoidal veins are destroyed and the perianal skin trimmed.

There are two important advantages in this method: (1) there is no distortion of tissue as results when hemorrhoids are dragged out of the rectum with forceps; and (2) the danger of an embolus is minimized because a ligature is placed before any surgery is done. When the operation is completed, a gauze wick saturated with one per cent nupercaine ointment is placed in the anal canal and lower rectum, and a tight dressing is applied with adhesive plaster. These are removed in twenty-four hours. Inability to urinate can be overcome by instilling fifty c.c.s of three to five per cent novocaine in the rectum, as suggested by J. W. Ricketts.<sup>9</sup> Convalescence is uniformly easy, and cosmetic results are not disappointing.

#### NEGATIVE GALVANISM

At a recent meeting of the American Proctologic Society, a symposium was presented on physiotherapy in rectal diseases. The speakers agreed that negative galvanism is a safe electrical treatment for use in internal hemorrhoids, but that it has a very great disadvantage in requiring so much time. Diathermy is quicker, but must be used cautiously, as suggested by H. H. Wheeler.<sup>10</sup>

The electrical treatment of hemorrhoids by negative galvanism produces a chemical reaction in the tissues and, therefore, is similar to the injection method in effect. The electric current releases hydrogen gas under the mucosa, which produces a plastic exudate, fastening the loose rectal mucosa down to the muscularis. This is what happens when we inject either quinine and urea hydrochloride or phenol solutions.

The literature on the negative galvanic treatment of internal hemorrhoids is very meager. Nevertheless, the treatment does have considerable merit. As with all office treatments, it is time-consuming and occasionally tries the patience of the physician holding the electrode. It may be used in all three stages of hemorrhoids, but in those of the third stage it is extremely difficult to eradicate them, and recurrences are bound to occur. The enthusiast has no complications, but the honest physician knows that aching and pain occasionally follow the treatments.

It is necessary to have a galvanic rectifier, suitable electrodes and a dispersive pad in addition to the rectal instruments. The well-saturated pad is attached to the positive pole, and the needle electrode to the negative pole. I treat the hemorrhoids *in situ*, using a Brinkerhoff speculum. The needle is inserted into the hemorrhoid which has been previously distended by normal saline. The needle must not come in contact with the skin of the anal canal nor with the muscularis of the rectal wall. The current is turned on very slowly until individual tolerance is reached, which is usually between ten and fifteen milliamperes. The current is left on until the mucosa changes to a grayish black, which requires five or ten minutes, when it is slowly turned off. The needle is reinserted in the same hemorrhoid, using the same technic, although for shorter duration, until the hemorrhoid is thoroughly treated. The extent of the individual treatments and the intervals between depend upon the reaction.

#### CHEMICAL INJECTIONS

The oldest non-surgical treatment of internal hemorrhoids is the injection of chemicals either into the hemorrhoids or just under the mucosa. The favorites are five per cent quinine and urea hydrochloride and five per cent phenol solutions. The literature on this subject is plentiful. Either solution will produce as good results as any electrical treatment. All stages of hemorrhoids may

be treated but, as Rosser<sup>11</sup> says, the third stage carries a low percentage of patients permanently relieved. The length of time required for completion of treatment and the amount of fluid injected in any given site must be learned through experience. When using phenol solutions, mineral oil should not be used as a diluent because of the danger of producing a chemical stricture.<sup>12</sup> The guide to the proper amount of fluid to inject should be distension, and not blanching of the tissues. The needle never should be inserted below the pectinate line, because the anal canal is well supplied with sensory nerves, and to do so is to invite disaster.

#### RECURRENCES AND PROPHYLAXIS

Recurrences may follow any non-surgical method of treating hemorrhoids and may occasionally follow a hemorrhoidectomy where the veins have not been completely destroyed. Since the cathartic habit is frequently considered to be the cause of hemorrhoids, or at least is thought to aggravate the varicosed condition, it follows that cathartics must be eliminated and normal colon function restored.<sup>13</sup> As bran and psyllium seeds are contraindicated in colon and rectal disorders, probably the best preventive of constipation is mineral oil or preparations containing agar-agar, without a cathartic added. It has been shown that even plain mineral oil occasionally does harm,<sup>14</sup> and therefore it should be used with discretion. The return of constipation after the hemorrhoids have been eradicated (no matter by what method) will prove troublesome. After medical treatment recurrence may follow, and after surgery annoying breaks in the scar tissue may occur, resulting in pain and bleeding.

#### CONCLUSIONS

1. The specialty of proctology is a natural evolution from the days of haphazard medicine and surgery.
2. The ligature operation offers a safe and speedy recovery from hemorrhoids and is the most efficient method, especially for those cases in the third stage. The clamp and cautery operation is passé.
3. Block anesthesia in proctology is the anesthetic of choice.
4. Negative galvanism is a valuable treatment in competent hands.
5. Chemical injections are safe when certain precautions are observed, and this method has an added advantage in the inexpensiveness of the required equipment. The disadvantage is that it is possible for any physician to inject hemorrhoids, frequently without any attempt at learning the technic or its indications.
6. Constipation must be corrected and normal bowel function restored.

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## DEFINITION, DESCRIPTION, AND LOGIC IN MEDICINE\*

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"If you wish to converse with me, define your terms," said the erudite Voltaire. No admonition could possibly be more apropos than this when applied to my subject. Therefore, I shall attempt to define each term as we deal with it, and while at first sight these names may seem unrelated and diverse in their meaning, yet as we come to study them in their practical application, we shall find them very closely akin.

Socrates insisted on defining his terms and taught his most ardent disciple, Plato, the habit of constantly defining his concepts. To Aristotle belongs the credit of first clearly discussing the idea of careful classification, in his treatise on definitions. We turn first for any definition to Webster's Unabridged Dictionary, and here we find that "a definition consists of a statement of the class in which the subject of definition is included, and an enumeration of the differentia, or specific marks or traits which distinguish it from other members of the same class." "A definition is adequate or exact when the differentiae make certain the identification of the object intended." In works on logic, these differentiae are called "essential attributes." If more than the essential attributes are given,

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then we are describing and not defining our terms. Logicians call this "accidental definition."

Aristotle believed that every definition has two parts, and that with these two parts we should be able to define anything. First, to what class, group, genus, or species the object belongs or is a part of; and, second, how it differs from other members of its class.

A very common example given is the definition of man: "Man is a rational animal." "Animal" is the group—"rational" the essential attribute that distinguishes man from other animals (although some may question this). If you add "he walks upright" you are merely describing more of his characteristics and these are not essential to a logical definition. If you say that man is a human being, you violate another rule of definition according to Pascal who urges you never to use the name defined; since human being and man are really synonymous, you are reasoning in a circle and not defining. Lastly, if you say that man is a person belonging to the species *homo sapiens* and possessing a soul, you are somewhat violating another tenet, namely, the use of figurative or ambiguous language. "There is no worse logical fault than to define the unknown by the still more unknown," says Descartes.

But why this discourse on the logical definition? Even in geometry, the most exact science of all, authorities cannot agree as to the true definition of parallel lines; and in mechanics, the next in exactness, there are differences of opinion concerning the subjects of force, mass, etc. What may we expect of medicine, one of the most inexact sciences known, and how are we concerned with definition in this subject?

All of us can recall lengthy disputes on medical subjects which could have been settled quickly had the speakers defined their terms. Without this adherence to definition there cannot be a logical discussion, for logic depends on definition as does philosophy in general. I recall an enlightening controversy on encephalitis in which the debaters became very much perturbed over the pathology of this disease. There were differences of opinion as to whether there was cloudy swelling, perivascular or round-cell infiltration, or atrophy due to deficient blood supply. Finally the chairman asked for a definition of the term. Each contestant had his own, and each was talking about different "species" of encephalitis.

The teacher, the author (yes, even the author of an examination paper), must learn the fallacy of exposition without proper definition.

Since a great many parts of medicine are not suitable for exact definition, we must fall back upon the art of accurate description to clarify our terms. By description we mean an enumeration of the essential qualities of a thing or species. In medicine we have splendid examples of this for it is essentially through accurate description that most disease states are defined and catalogued. To

be able to see in the commonplace what the poet sees, and to reveal it to others through beautiful verse is indeed literary art. To be able to see in an afflicted patient the true nature of disease is medical art, but to describe it so that others will recognize it is true medical descriptive art. In medical description we may be as verbose as necessary to convey our meaning, but no more. We must speak in the vernacular and use good English so that all students will understand us. In so doing, misconceptions may be avoided. We must not use poetic license to disfigure or distort facts. That is just what lay writers are doing today and consequently they are misinforming their readers. We must stick to the unvarnished truth, for the vagaries of nature are stranger than the wildest fancies of our minds, and when a physician draws upon his imagination in describing a disease state, he becomes a novelist and not a medical author.

Does this mean that the physician may not employ figures of speech such as similes, metaphors, or even anecdotes to reveal his facts? Not at all. The nutmeg liver, sago spleen, and similar expressions, reveal what the average man is usually thinking about—something to eat; therefore, comparisons in medical literature are freely drawn from foodstuffs.

Medical teachers must at times even dramatize their subjects in order accurately to describe. As in the subject of shock, no definition is available; accurate description is the best definition, and by dramatization of these symptoms the teacher impresses indelibly upon the minds of his hearers a true conception of this syndrome. For example, a common definition of shock as given in some texts is, "A marked depression of the vital centers." A poetic definition is the one given by the elder Gross when he calls it "a rude unhinging of the entire machinery of life." But how much more vivid than either of these is a description of the constant characteristics of the syndrome. Dr. W. B. Cannon avers that no definition is necessary for so complex a word. He prefers to describe the condition as follows: "Shock is a general bodily state which occurs after severe injury and which is characterized by a persistent reduced arterial pressure, by a rapid, thready pulse, by a pallid or grayish or slightly cyanotic appearance of the skin which is cold and moist with sweat, by thirst, by superficial rapid respiration and commonly by vomiting and restlessness, by a lessened sensibility and often by a somewhat dulled mental state." However, if we accept them as part of our definition, then allied conditions with similar groups of symptoms may not be called shock. That is to say that if the patient is in a state of collapse with a high blood pressure, he is not, according to our descriptive definition, in a state of shock. We, therefore, have limited our discussion to the same syndrome, for we have agreed by definition and description what we mean by the term "shock."

Now let us turn to some of the classical descrip-

tions of disease in medicine and we shall find ample illustrations for our point. First, the facies hippocratica, "A sharp nose, hollow eyes, collapsed temples; the ears cold, contracted and their lobes turned out; the skin about the forehead being rough, distended and parched; the color of the whole face being green, livid or lead-colored." In the moribund case of peritonitis we see this very picture before us.

Then the description by William Heberden of angina pectoris, in 1818: "But there is a disorder of the breast marked with strong and peculiar symptoms, considerable for the kind of danger belonging to it, and not extremely rare, which deserves to be mentioned more at length. The seat of it, and those of strangling and anxiety with which it is attended, may make it not improperly be called angina pectoris.

"They who are afflicted with it, are seized while they are walking (more especially if it be up hill and soon after eating), with a painful and most disagreeable sensation in the breast, which seems as if it would extinguish life if it were to increase or continue; but the moment they stand still, all this uneasiness vanishes.

"In all other respects, the patients are at the beginning of this disorder, perfectly well, and in particular have no shortness of breath, from which it is totally different. The pain is sometimes situated in the upper part, sometimes in the middle, sometimes at the bottom of the os sterni, and often more inclined to the left than to the right side. It likewise very frequently extends from the breast to the middle of the left arm. The pulse is, at least sometimes, not disturbed by this pain, as I have had opportunities of observing by feeling the pulse during the paroxysm. Males are most liable to the disease especially such as have passed their fiftieth year.

"After it has continued a year or more, it will not cease so instantaneously upon standing still; and it will come on not only when the persons are walking, but when they are lying down, especially if they lie on their left side; and oblige them to rise up out of their beds. In some inveterate cases it has been brought on by the motion of a horse or a carriage, and even by swallowing, coughing, going to stool or speaking or any disturbance of mind."

To say that this is a beautiful description would involve defining beauty which I would not presume to do, but it is a vivid, accurate, medical classic which stands out today for its authenticity and preciseness as it did over one hundred years ago. Men accepted it as a definite clinical entity. However, I am sure that physicians then, as they do now, asked "Is it logical?" They found that it was a logical explanation for a particular complaint and it became an accepted truth in medicine.

What do we mean when we ask, "Is it logical?" In other words, how may we define and describe logic? Far be it from me, a lowly surgeon, to pose as a ponderous logician or philosopher. What

I have to say is just a superficial but nevertheless practical application of the principles of "The Science of Reasoning" as Jevons describes them.

Bacon has said that "Logic and rhetoric (please note the latter, alas! almost a forgotten member of the English language) make men able to contend. Logic differeth from rhetoric as the fist from the palm; the one close, the other at large."

From our point of view we need be only sufficiently technical to understand fundamentals. I like to quote Colton who says, "Logic is a large drawer, containing some needful instruments, and many more that are superfluous; a wise man will look into it for two purposes, to avail himself of those instruments that are really useful, and to admire the ingenuity with which those that are not so are assorted and arranged."

Shall we be more specific, look behind the closed doors of the philosopher and see what "reagents" he employs? He speaks of "terms" by which he means names of things or substantive nouns. When connected by a verb, two such names make a "proposition" or an "assertion." Three assertions or propositions make up an argument or syllogism. A common illustration is as follows:

Iron is a metal.

Every metal is an element.

Therefore, iron is an element.

In geometry we say that two things equal to the same thing are equal to each other. In this illustration we must be sure, first of all, that iron is a metal, lest we use the methods of the so-called Sophists, men whose logic is perfect but whose premises are wrong. This first assertion constitutes what is known as the major premise; the second statement is the minor premise; and the third is the conclusion. This is deductive reasoning. The trouble with this type of reasoning is that we take for granted the major premise which is exactly the thing to be proved. Then we spend hours reasoning backwards in an effort to clarify and to prove the major premise to be correct.

In general, logic is composed of observation and introspection, deduction and induction, hypothesis and experiment, analysis and synthesis. Of these, induction, observation, analysis, experiment, and discovery and a posteriori reasoning seem to be similar methods of thought, while deduction, introspection, synthesis, hypothesis, and instruction and a priori reasoning belong to another school of logical method.

Aristotle is perhaps the father of deductive reasoning, that is, from known facts to theories; thus he is the inventor of the syllogism. This is the simpler way of reasoning and, if properly applied, a most useful method. To Francis Bacon belongs the credit for popularizing inductive reasoning—that is reasoning from the abstract or unknown to produce a fact. This method was known to Hippocrates. Today it is best exemplified in experimental medicine and surgery. I cannot refrain from quoting the scholarly rhetorician Mc-



Caulay who said, "Induction has been practiced from morning till night by every human being since the world began. The man who infers that mince pies disagreed with him because he was ill when he ate them, well when he ate them not, most ill when he ate most and least ill when he ate least, has employed, unconsciously but sufficiently, all the tables of the *novum organum*."

Corresponding with deductive methods is *a priori* reasoning, that is, reasoning from general propositions to particular conclusions, whilst inductive method employs a *posteriori* reasoning—that is, reasoning from observed facts to general conclusions.

In ancient Greece we are told that there were three classes of physicians:

First, those who were known as empirics; they relied on experience and observation alone for their knowledge, and from this observation they drew general conclusions without the aid of science or a knowledge of principles.

Second was a school whose members were known as methodists; they relied on theory and pure logic alone, rejected observation and founded their practice on hypothesis and reasoning.

Third was the group of physicians known as dogmatists, who usually took a middle course and, as their name implies, were opinionated about their doctrines.

Today we have similar divisions of men in the practice of medicine. There are those ultra-scientific men who analyze, divide, and subdivide, and experiment to such a degree that they cannot see the whole because of its many parts. They observe facts and more facts but fail to unite them into a workable conclusion. Obviously these men are necessary, even indispensable to the further progress of our art. In this group belong some workers in experimental medicine and surgery—men gifted with a divine spark of initiative that makes for discovery. They accept nothing that cannot be proved in the laboratory.

Then there is a second group of men who may be likened to the dogmatists of old. They accept nothing from their scientific brethren, for they insist that the last word hasn't been written. These men have conjured up in their minds some pet theories of the causation and treatment of disease. They have never applied any form of logic to determine whether their theories are correct or not. They remind one of an individual with a systematized delusion, which may be absurd or not, yet he will never accept proof to the contrary.

There is a third type of physician, sincere and honest in his belief, who like Brock and others have said "is trying to reduce medicine to the science of finding a label for each patient and then treating not the patient but the label." He is the product of over-specialization. If a woman has a backache and consults him, and if he happens to be a gynecologist, the backache must be due to a retroverted uterus; if he is an otolaryngologist, the

backache is due to diseased tonsils; if he is a urologist, the backache is due to kidney disease; if he is a proctologist, the backache is due to constipation; and if he is an orthopedic surgeon, the backache is due to a postural defect. However, if she happens to go to the good old family doctor, he applies simple inductive logic. He takes into consideration the woman's environment, the fact that she is the mother of five children, and that she does most of her own house work. He finds out that she gets insufficient sleep and perhaps is undernourished, and logically reasons, if you will, that she has a tired back, overworked and overstrained. Then he sets out to see how he can help the family keep going while the mother takes a few days of rest in bed. He may have his imperfections as a physician from a scientific point of view, but we must agree with Galen when he says, "The best physician is also a philosopher."

Who is the ideal physician or surgeon?

First, he who knows the background of his art, namely, the exact or natural sciences such as physics, chemistry, and biology.

Second, he who realizes that medicine and surgery must of necessity remain an inexact science. By science we mean systematized knowledge. Since the practice of medicine defies exact formulation, it must remain an art or a system of knowledge made efficient by mental and physical skill. Obviously the more perfect the scientific part of medicine becomes, the more useful and beneficial will become the art of medicine.

Third, he is a logician. He believes with Hippocrates in taking inventory from time to time. He walks with the experimental surgeon who analyzes, experiments, and discovers isolated facts, and he observes those magical phenomena that are constantly being brought forth from our laboratories. Then by induction and a *posteriori* logic he draws conclusions, but he doesn't stop there. He now walks humbly with the precepts of Aristotle, takes the conclusions and makes hypotheses from them; then through introspection, deduction, and *a priori* logic, he proves his concepts to be right or wrong. Finally, he synthesizes all of his facts into a pragmatic and, above all else, a workable whole and instructs his colleagues accordingly.

I make this plea for logic in medical practice because I believe that we have forgotten that medicine must be linked with the natural sciences, with sociology, with environmental factors (heterotypic and idiosyncratic), and with every other part of medicine into a synthesized whole. Perhaps this is the reason for Cushing's definition of the ideal surgeon as "a good internist who operates." No doubt we should begin in our medical schools and return to a system of aphorisms for post-graduates. This we actually plan to do. We shall give a review of the various branches of medicine as seen in their proper perspectives.

To define and describe the normal and the abnormal is a picture that each physician must be

able to paint in words as well as with or without the aid of illustration and demonstration. The greatest good from his ability to do this will be for himself, for it will clarify his own mind and his own knowledge. As we all know, thought and mere memory are two different things; anyone can memorize enough data to pass an examination, but to think and think properly is a pragmatic accomplishment. By clearly reasoning his problems in his own mind he will be qualified to discuss these problems with others, and thus he will clarify, improve and progress in his acumen. Finally he will speak "his individual word of all things seen and heard" and will thereby contribute his share to the sum total of knowledge from which truth is finally evolved.

Edwards has said that "Assertion is the logic of ignorance and prejudice; argument the logic of wisdom and truth."

The use of definition, description and logic in the every-day practice of medicine is not just an idle dream for those who delve into the depths of philosophy. It gives the physician the proper perspective in the management of his patients, it makes him think a problem through from beginning to end, and makes him above all else cautious. Since logic is the backbone of philosophy, a physician or surgeon who uses it will have a guiding doctrine for the management of his cases, which will be to him what the compass is to the mariner. It will carry him through his every-day problems more easily, and will more often land him in the harbor of success. As John Dewey has aptly put it, "A physician or engineer is free in his thoughts or his actions in the degree in which he knows what he deals with. Perhaps we find here the key to any freedom."

Am I an idle dreamer, speaking of a Utopia for myself, my friends and my colleagues? Perhaps so, but I agree with the optimistic Robert Browning when, in his poem of the perfect painter Andrea del Sarto, he says, "A man's reach should exceed his grasp, or what's a heaven for?"  
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## BEDSIDE OBSERVATIONS ON PROGNOSIS\*

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This subject for discussion has been chosen for several reasons. A search of the literature shows that there is comparatively little written on the subject. Text books give us only a bit of prognosis with the discussion of each disease. In the rapid advancement of medical and surgical knowledge, ideas of prognosis have happily changed. Greater emphasis on diagnosis and treatment has appeared to render prognosis of less importance

in our medical attitude. Yet, after all, the idea of prognosis is constantly with the practicing physician and his patient, be it ever so good or so gloomy. A brief résumé of the subject seems appropriate in the hope that such a review may prove helpful to some of us who are called upon to carry responsibility in cases of serious illness.

Classification of prognosis is suggested as remote, consequent, and immediate.

### REMOTE PROGNOSIS

Remote prognosis has to do with problems not of the present. It concerns the future of possible disability or death, which may later come from the signs and symptoms now in evidence. Remote prognosis is the factor considered in every life insurance application. Through facts obtained by enormous volumes of statistics, a corporation enters a wager with the policy-holder based purely on remote prognosis. By answers to some fifty-seven simple questions, an acceptable basis is arrived at upon which large sums are agreed to be paid at death or for certain disabilities. The error in prognosis by the company is just enough to encourage most of us to try our hands at the wager. Life insurance companies know very well that remote prognosis on human life, arrived at by statistics on a large scale, is fairly reliable and profitable; then they decided that for a few dollars added to the payment, persons could be guaranteed never to become totally and permanently disabled. However, this became an unprofitable wager for the insurance companies. They had certainly made a prognostic error. There had been no previous statistics compiled on human nature in an economic depression!

Remote prognosis enters into all examinations of persons in health, such as those who enter industry or other employment; those who contemplate matrimony and childbirth; those who compete in sports and athletics; those who arrive at school age; certainly every baby at birth, and nowadays most of those signifying the intention of being born.

### CONSEQUENT PROGNOSIS

Consequent prognosis may be applied to that situation encountered, the outcome of which is dependent upon factors which may completely change the picture at any time from good to bad or vice versa.

Let us consider, for example, diabetes, the consequent prognosis of which is based entirely upon adequate treatment and the cooperation of the patient. The same is true of pernicious anemia. We may add many other conditions all the way from auricular fibrillation to the deformity of Louis XVI. It is in consequent prognosis that the element of human nature and the adaptability of the individual constitution must be reckoned with. In arriving at consequent prognosis, gross and embarrassing errors tend to caution the doctor. It concerns the prognosis in mild and acute diseases, of chronic and lingering afflictions, of minor accidents; it

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is also greatly influenced by improvements in the hazards of surgery. Consequent prognosis is affected by changes in the very nature of epidemic diseases, as for example scarlet fever, measles and pertussis. The pendulum swings from one degree of severity to another. We do not know the reasons why this is so.

Other diseases have been all but eliminated by the efforts of the profession and the public. We mention malaria, cholera, typhoid fever, and that formerly deadly disease of which young doctors learn by reading, seldom by seeing, cholera infantum. Grandmothers no longer inform us of the "liver grown" child, whatever that was.

Any malignancy calls for some form of consequent prognosis. This also applies to every obstetrical case.

Consequent prognosis and in many instances immediate prognosis is rendered less gloomy and uncertain by the continuous advancement in modern methods of diagnosis and treatment of disease. This refers to such conditions as diphtheria, diabetes, syphilis, tuberculosis, and to a great variety of surgical possibilities formerly considered beyond the skill of the profession.

Sickness in its course may turn at any time into a serious situation. This may be from the inability of the constitution of the individual to withstand the severity of the disease itself or may be from complications unforeseen.

#### IMMEDIATE PROGNOSIS

Thus from consequent we are brought suddenly to consider immediate prognosis. It is imperative that every physician be alert to such possibilities of change. For that purpose the following is offered, in review of a collection of more or less valuable observations.

Apprehensive misgiving read in the countenance of one who is nursing the seriously ill should awaken the attending physician to search his patient with diligence and alertness, for lay observations while certainly not based upon science deserve very respectful consideration. Frequently herein lies the key to a new conception of the problem at hand. Household responsibility, with experience in nursing the sick in her family, renders the average woman more skillful than the man. She is by nature also more alert in her observations of detail. No doubt Shakespeare had this in mind in the play "King Henry V" when selecting a suitable character to describe the last moments of the jovial Falstaff. He chose the tavern hostess to say, "A' parted even just between twelve and one, even at the turning of the tide: for after I saw him fumble with the sheets and play with flowers and smile upon his finger's ends, I knew that there was but one way; for his nose was as sharp as a pen, and a' babble of green fields—So he bade me lay more clothes on his feet; I put my hand into the bed and felt them, and they were as cold as any stone; then I felt to his

knees, and they were as cold as any stone, and so upward and upward, and all was as cold as any stone."

When a patient is seriously ill he may be attended by more than one physician. Let us say there is a medical consultant, another representing a specialty, a surgeon, and the interne. Who of these is in the best position to estimate the factors which concern the prognosis? The family physician is best fitted to estimate the seriousness of any condition arising in the course of the sickness of his patient. This is by reason of his previous experience with the patient and his family. He is in position to understand his physical and constitutional background. He knows the history better than it could be written. He may have confidential information which could explain certain unusual emotional reactions in the patient. It is he who should estimate the degree of fear entertained or the unusual amount of stoicism sometimes displayed. The close relationship existing between the attending physician and his patient renders the latter more expressive to his doctor. The family doctor is by the nature of this relationship expected to carry the most responsibility for the outcome of the patient under his care.

It is here that I would call the respectful attention of the interne to his splendid opportunity to train his faculties in observation. By repeatedly studying the patient hopelessly ill or dying he can prepare for himself a fund of ever-useful information. Death of a patient seldom occurs without some warning to those in attendance.

The following observations are based on the five senses of the physician. None is based on laboratory procedures. Many must occur in conjunction with others. No attempt will be made to explain the pathology responsible for the signs and symptoms given. The various sources of information may be found in an appended bibliography.

Mental attitudes and unusual conduct in a patient seriously ill may be manifested in peculiar mental distress, an unexplained anxiety, a loss of interest in his surroundings, failure to be interested in the greeting of a dear friend, or failure to notice a consultant called in. There may be expressed a presentiment that he expects to die. He may make preparation for the final event and soon prove himself correct to the surprise and dismay of his attendants. An undue euphoria arising late in acute illness deserves grave consideration. An extreme hunger may occur at the same time. This is known as the hunger of death.

Children from seven to seventeen years of age bear serious illness or mortal injury with an amazing fortitude so marked as to give no clue from outward appearance to that which may be quickly fatal.

In post-operative peritonitis a quickened responsive politeness may be the first sign of a fatal issue.

The attitude of the patient in bed is an index of vitality. Much significance is often attached

to an attitude described as sliding to the foot of the bed. To my mind this picture is not one of sliding, but is a characteristic flatness against pillow and mattress as if the stricken patient were being held in position by some mysterious suction from beneath him. This picture is seen in all ages and is a bad sign in prognosis.

It is said that as human death approaches taste, smell, sight and hearing leave in the order mentioned.

The following signs and symptoms are arbitrarily divided into three classes according to the degree of seriousness each suggests. This classification is my own and is merely a method of simplifying a complex assortment of items enumerated.

Beginning with class three we may mention less serious signs:

1. Eyes that drop momentarily out of alignment. This occurs more often in children with acute infections.
2. The peculiar roughened skin of the forehead in long-continued illness.
3. Loss of ability to swallow, except in quincy or other acute pharyngeal infections.
4. Marked dehydration, without means of correction.
5. Sunken temples.
6. Cheyne-Stokes respiration, but not this alone, as such respiration occasionally occurs in apparent health in the aged in sleep.
7. In pneumonia, a systolic pressure, reading lower than the pulse.
8. Acetone breath.
9. Alteration of voice if not due to hysteria. In a child or infant, a high-pitched voice is a serious sign.
10. Disappearance of peripheral reflexes except in diseases of the central nervous system.
11. Purposeless fumbling movements of the fingers, carpalgia which literally means gathering chaff. (Patients seldom really pick at the bed-clothing.)
12. In wasting diseases, gritting of the teeth, except in children.
13. Subsultus tendinum—muscular twitchings.
14. Aphthous stomatitis late in disease.
15. Petechia late in acute disease.
16. Hematogenous jaundice following fevers.
17. Loss of one or both sphincters when conscious in serious disease.
18. Loss of the sphincter of the mouth giving a characteristic change to the facies—interference with speech and taking of fluids by mouth.
19. Fifty per cent of sick patients with badly coated tongues die.
20. Any irregularity of the pulse whether from frequent extrasystole or fibrillation may be the first sign of circulatory failure.

More serious signs, say in class two:

1. Coma: Ninety per cent of people die in coma. Sixty per cent of coma is fatal. Present

day methods of treatment perhaps alters the latter statement.

2. Cheyne-Stokes respiration in coma.
3. Convulsions in coma.
4. Cardiac asthma (the term is loosely applied). Any attack may be fatal.
5. It is more likely to be fatal if occurring in daytime. It occurs more frequently at night.
6. Eyes half open in sleep.
7. Dropping of the lower jaw.
8. Lowering of blood pressure from above 230 to below 100. In any case below 40.
9. Continuous coffee ground vomit, except in gastric ulcer.
10. Black vomit forty-eight hours post operative.
11. Hiccough late in disease, and persisting or frequently recurring.
12. Edema of glottis in patient over forty-five years of age.
13. Restlessness after severe hemorrhage with no pulse at the wrist is considered very likely to be a fatal sign.

Observations in class one:

1. Temperature: It is said only in heat stroke does a patient recover if temperature is 108; in any case of 107 for two hours: in apoplexy with elevated temperature for forty-eight hours.
2. Apoplexy with coma, and mucus flowing from mouth. This is more copious than saliva and interferes with respiration.
3. Apoplexy with convulsions and profuse sweating.
4. Apoplexy and coma with a firm pulse.
5. In fever, profuse sweating with cyanosis, the temperature remaining high.
6. In emaciation, the loss of half the body weight.
7. Long convulsions except in epilepsy.
8. After electric shock—auricular fibrillation means death.
9. Vomiting bloody frothy mucus, except in hemorrhage or convulsions.
10. The black vomit of yellow fever.
11. A noise as of churning in the abdomen with each respiration, late in disease.
12. The eye:  
Failure of the reflex to light. This is not true in fainting, hemorrhage or central nervous diseases. Fixed stare with glazing of the orbit. There is dilatation at death.
13. Respiration:  
Sterno-mastoid breathing. Average time patient lives from the onset is twenty minutes. This sign may be present in respiratory obstruction and asthma. Irregular respiration or continued high respiratory rate. Long inspiration with collapse type expiration. Respiratory excursions of the Adam's apple. A fanciful beckoning upward jerk of the face with each respiration. The death



rattle, an inability to remove mucus from the trachea or larynx by expiratory effort. Fluid from the mouth or nostrils.

14. Circulatory:  
Long standing cases of heart disease and arteriosclerosis must be mentioned particularly as they are quite often misleading and constitute exceptions. In acute conditions and lingering illnesses the signs of circulatory failure are more nearly constant. Coldness and variable cyanosis of the extremities. Ashen color of the face. Cyanosis of tip of nose, lower lip, or edge of dependent portion of the ears. The sharpened nose with pinched alae.

15. Accuracy on pulse observations depends upon previous experience with the pulse of the individual patient on account of natural variations in pulse findings. Many physicians of today have little experience with the pulse as they have placed more reliance in the stethoscope. If one places reliance on feeling the pulse the following signs are to be considered class one:

1. When the pulse disappears, if the patient's hand is raised, death may be expected within twenty-four hours.
2. Pulsus alternans obtained by pulse only.
3. In skull fracture, four or five beats, then drop one beat.
4. In serious illness with gradual rise in rate. in the aged to 140; in the adult to 160; children sometimes recover after a pulse rate of 190.
5. In any case exceptions must be made to pericarditis, tuberculosis, hyperthyroidism and paroxysmal tachycardia.
6. A rapid pulse for days then with no abatement of the disease a pulse drop to fifty or sixty. Here we must again except paroxysmal tachycardia.

These signs and symptoms indicating the bad prognosis are reviewed for the help they may give to those whose duty it is to care for patients who may exhibit them in approaching death. Good judgment must ever be the guide to the physician in his final interpretation of the problem of prognosis.

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ABSTRACTS

EARLY HISTOLOGIC DIAGNOSIS OF CARCINOMA OF UTERINE CERVIX

HENRY SCHMITZ and E. L. BENJAMIN, Chicago, (*Journal A.M.A.*, Sept. 15, 1934) report an instance in which, ten months prior to a diagnosis of typical carcinoma, the microscopic examination of the cervix showed leukoplakia, atypia and neoplasia of the epithelial cells, a negligible amount of epithelial heterotopia and a stroma reaction. Such blastomatoid changes are apparently irreversible and should be considered as the earliest histologic evidence of carcinoma of the uterine cervix. Such blastomatoid changes should be considered malignant. The authors believe that, if such cases are not treated adequately at the time of their detection, they should be kept under close clinical observation. If marked heterotopia and breaking through of the basement membrane have occurred, the patient should be immediately and adequately treated by surgery or radiation. It will become the duty of the physician and pathologist to subject all cervical tissues removed at operation to serial sectioning and the changes of neoplasia should be considered as the earliest histologic evidence of carcinoma of the uterine cervix. The detection of early carcinomas of the cervix can be attained only by employing palpation and inspection of the genital organs as part of every physical examination. Linear cauterization of the vaginal portion of the cervix will cure chronic cervicitis. If the lesion does not heal or if it recurs, low circular amputation of the diseased part of the portio vaginalis and microscopic examination of serial sections of all the tissues will lead to an early diagnosis of cancer.

PATHOLOGIC CHANGES OF ST. LOUIS TYPE OF ACUTE ENCEPHALITIS

HOWARD ANDERSON McCORDOCK, WILLIAM COLLIER and SAMUEL H. GRAY, St. Louis (*Journal A.M.A.*, Sept. 15, 1934), state that the essential pathologic process is an acute nonsuppurative inflammation of the central nervous system characterized by severe vascular congestion with occasional petechial hemorrhages, cellular infiltration of the nervous tissue and meninges with mononuclear cells and degenerative changes in the nerve cells. They discuss the following factors of the St. Louis type of acute encephalitis: gross pathologic changes in fatal cases, microscopic changes, the distribution of lesions in the nervous system, changes in other organs and bacteria in the nervous tissue. A comparison of the St. Louis type of encephalitis differed from the lethargic type in the following respects: 1. The meninges showed more intense infiltration with mononuclear cells than usually was found in the lethargic type. 2. Degenerative changes in the nerve cells were more frequent and neuronophagia was more marked. 3. The inflammatory foci were more widespread throughout the brain, often occurring in great numbers in the cerebral cortex, and were not restricted to the midbrain or basal nuclei. 4. The cranial nerve nuclei, especially the third, rarely showed degenerative changes such as are frequent in the von Economo type. 5. There was more intensive involvement of the spinal cord in the St. Louis type.

THE ENCEPHALITIS EPIDEMIC IN ST. LOUIS CITY AND COUNTY, 1933: PROGNOSIS

ANDREW B. JONES, St. Louis (*Journal A.M.A.*, Sept 15, 1934), points out that increasing age influenced prognosis more than any other single factor, the greatest percentage of mortality occurring in the aged. The presence of preexisting organic diseases such as nephritis, heart disease or debilitated states greatly increased the chances of a fatal termination. No single clinical sign or symptom considered alone was of much prognostic significance. Absent reflexes and retention of urine indicated a fatal outcome regardless of the duration of the illness, age of the patient or number of cells in the spinal fluid. The development of râles in the chest, bronchopneumonia and the presence of albumin, casts and blood in the urine were of grave prognostic significance. The duration and severity of the illness were extremely variable. The mild or abortive case lasted two or three days, the ordinary case seven to fourteen days, the chronic case a few weeks or months.

# THE INDIANAPOLIS SESSION

## October and Convention Time!

Once again members of the medical profession in Indiana are looking forward to the annual meeting of the Indiana State Medical Association—and once again Indianapolis is looking forward to entertaining the state's physicians and is making every effort possible to make the eighty-fifth annual session, October 9, 10, and 11, the most successful ever held.

The Capital City, the Indianapolis Medical Society and the Indianapolis Convention and Publicity Bureau extend to every convention visitor a cordial welcome and invitation to enjoy and participate in the three-day program of educational and recreational features, so arranged as to claim the interest of everyone during every minute of the convention. If you would spend three days in the most profitable way possible, be in Indianapolis on October 9, 10, and 11.

### EARLY HISTORY OF INDIANAPOLIS

Indianapolis is one of the comparatively few cities in the United States which might be described as made to order, according to Christopher B. Coleman, Indiana Historical Bureau director. When Indiana was admitted to the Union in 1816, the Federal Government gave the state a grant of four sections of land to be chosen and set apart for a state capitol. In 1820, a commission presided over by John Tipton, one of the leaders in public life and in Indian fighting in the early days of the century, located the grant where Fall Creek flows into White River. The first permanent settler is supposed to have been John McCormick, February, 1820. The site of his cabin, near the Washington Street bridge over White River, is now marked by a bronze tablet. The next year, 1821, the city of Indianapolis was laid out.

The plan of the city undoubtedly was suggested by that of the city of Washington. Alexander Ralston, who drew up the plan, had assisted Major L'Enfant in the survey upon which the city was laid out. The central Circle, which later became the site of the Governor's house and eventually of the Soldiers' and Sailors' Monument, was surrounded by square city blocks unbroken within the central mile save for the diagonal streets beginning at the corners of the four squares in which the Circle is located.

The location, on the whole, proved to be a wise one, though the full advantages were not realized until the middle of the century. There was at first

a great deal of fever and the sickness was ascribed to the portions of low-lying ground. Efforts also to develop navigation along White River proved unsuccessful. The National Road, however, which within the city is Washington Street, eventually gave communication with the East, and the old Madison Road with the South and the Ohio River.

In the era of canal building in the thirties, a canal was laid through Indianapolis, but that part of the system failed in the general collapse of the internal improvement scheme of the state. The coming of railroads, 1847, and the importance of the city for transportation purposes during the Civil War gave it an impetus which has made it in recent years the largest city in the United States which is not on a navigable waterway.

The present State House, completed in 1888, is, strangely enough, one of the few public buildings in the United States the cost of which (\$1,980,000) was less than the original estimate and appropriation.

Besides the State House and the agencies of government connected with it, the State of Indiana maintains at Indianapolis the Indiana

School for the Blind, the State School for the Deaf, Central Hospital for the Insane, the Indiana Woman's Prison, the Robert W. Long Hospital and the James Whitcomb Riley Hospital for Children (both connected with Indiana University), and the Soldiers' and Sailors' Monument and the Indiana World War Memorial Plaza.

The revolution of 1848 in Germany accelerated an important immigration of Germans settling in Indianapolis. In 1851 began the organization of German clubs which have had a great influence upon the city, especially in music and in social life. Important German newspapers have been published in Indianapolis since 1850. In this connection, it is interesting to note that a German edition of the 1852 revised statutes of the State of Indiana was published at Indianapolis by authority of the State. In common with most other cities, Indianapolis in recent years has drawn the largest proportion of its foreign immigrants from southern and eastern Europe, particularly from the Balkans. Many of these are employed in the packing plants.

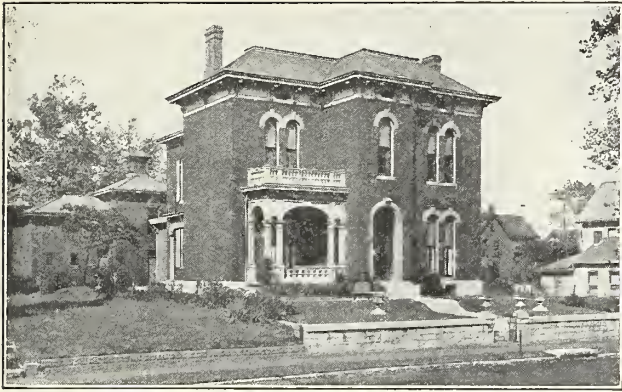
### HOSPITALS

Indianapolis' hospitalization facilities are both diverse and, in most instances, more than adequate. The list of these includes the City Hospital, Robert W. Long Hospital, James Whitcomb Riley Hospital



JOHN W. CARMACK  
Chairman Committee on Arrangements

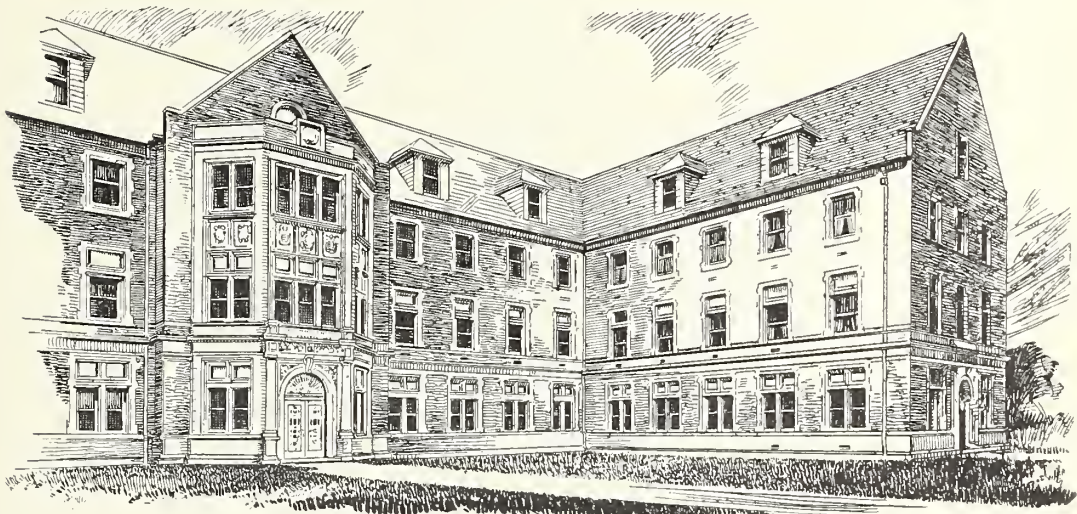




HOME OF JAMES WHITCOMB RILEY



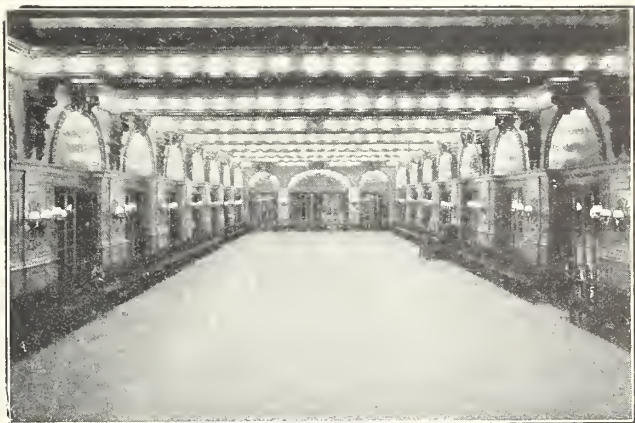
SUNKEN GARDENS  
Garfield Park



RILEY MEMORIAL HOSPITAL FOR CHILDREN



SCOTTISH RITE CATHEDRAL TOWER



RILEY ROOM—CLAYPOOL HOTEL



for Children, William H. Coleman Hospital for Women (all located in the Indiana University Medical Center, where also is the University School of Medicine) the Methodist Episcopal Hospital, the St. Vincent's Hospital, St. Francis Hospital, Veterans' Administration Hospital, Indiana Christian Hospital, and a number of privately owned and operated hospitals and sanitariums, including Neurenhurst, Dr. W. B. Fletcher's sanatorium, and "Norways," Albert E. Sterne Memorial Hospital.

Since the last state convention of the Indiana State Medical Association in Indianapolis, the beautiful and efficiently equipped limestone building of the Indiana University Dental School has been completed, adding another unit to the Indiana University Medical Center.

#### POINTS OF INTEREST

**World War Memorial.** Recognized throughout the world as the most outstanding and gigantic enterprise of its kind ever undertaken, Indianapolis points to the Indiana World War Memorial with the greatest of pride. Conceived in honor of Indiana's participation in the World War, this memorial plaza covers five entire city blocks in the very heart of the downtown district. The main shrine is bounded at the extreme north by the Public Library and on the south by the Federal Court House and Postoffice Building. The entire project cost the city, county and state \$15,000,000. These extremity structures, in Indiana limestone, lend harmony to the limestone central shrine. The American Legion National Headquarters Building occupies a portion of the plaza near the majestic sarcophagus of Indiana's first World War dead.

Medical convention visitors are invited to visit the main shrine which is open daily from 10:00 a. m. until 4:00 p. m. The flag shrine room is richly decorated with fourteen large granite pillars extending from the floor to the 120-foot ceiling.

**Soldiers' and Sailors' Monument.** This monument, located in the Circle at the hub of the city, is one of the finest examples of monumental architecture in the world and is surpassed in height only by the Washington Monument. Dedicated to "Indiana's



CLAYPOOL HOTEL  
Headquarters of Session

Silent Victors," it was fourteen years in construction, completed in 1901 at a cost of \$600,000. Height of the monument is 284 feet, 6 inches.

**Motor Speedway.** The Indianapolis Motor Speedway, upon whose bricks the greatest motor car races of the world annually are staged, should prove interesting to every visitor in Indianapolis. Trial experiments which have done so much to produce the high standard now achieved in every motor car are held here. Annually, approximately 150,000 persons gather here to witness the 500-mile international sweepstakes. No sporting event of similar nature calls together such a field of daring drivers and such an audience.

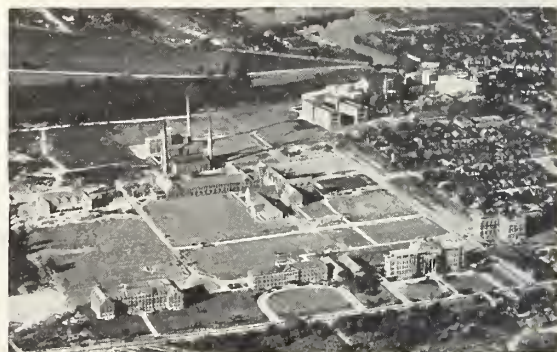
**Riley Home.** For more than a decade the modest brick home of James Whitcomb Riley in Lockerbie Street has been a shrine to which have come thousands of children and adults, lovers of the verse of the immortal Hoosier Poet. The Riley Home, within a short distance of downtown, has been set aside as an Indianapolis institution and is being preserved to perpetuate the memory of Indiana's maker of homely verse.

**Fort Benjamin Harrison.** Ten miles northeast of the city lies Fort Benjamin Harrison, one of the best known army posts in the country. Here is stationed a regular army detachment with full complement of officers and enlisted men, representing major branches of the United States Army.

**Other points of interest** include the Indianapolis Athletic Club, one of the finest in the country; the Columbia Club in the Circle, one of the most famous of Republican organizations; the ornate, mammoth Murat Temple, wherein is housed the Murat Theater, Indianapolis home of Nobles of the Mystic Shrine; the Scottish Rite Cathedral, completed in 1927 at a cost of \$3,500,000; the John Herron Art Institute; many beautiful parks; the National Headquarters



SOLDIERS' AND SAILORS'  
MONUMENT



AERIAL VIEW INDIANA UNIVERSITY HOSPITALS



of the American Legion occupying the northwest corner of the Indiana War Memorial Plaza; Butler University; and Indianapolis' famed residential district—Indianapolis, the city of homes, where more than forty per cent of the families own their own homes.

#### PLACES OF MEETING

Headquarters for all scientific and general meetings of the convention will be in the Claypool Hotel, which offers ample facilities for accommodating every phase of the convention, including the annual banquet which, like the general meetings, will be held in the famous Riley Room. The commercial and scientific exhibits will be set up on the mezzanine floor. Here, too, under the same roof, will be smaller rooms available for committee meetings, fraternity and class luncheons or reunions and meetings of societies meeting concurrently with the Indiana State Medical Association. Installation of a public address system in the Riley Room will insure perfect audition for every one in attendance.

While the Claypool Hotel will be the headquarters for the Association sessions, the Claypool and other Indianapolis hotels offer comfortable accommodations and good meals to all convention visitors at reasonable rates.

#### GOLF

The annual golf tournament will be played on the beautiful course of the Highland Golf and Country Club, northwest of the city. In spite of the summer's drought, the greens and fairways of this course are in remarkably good condition.

Indianapolis offers five municipal golf courses: Coffin, South Grove, Riverside, and Pleasant Run, all eighteen-hole courses, and Sarah Shank, nine holes. Fees are 50 cents for eighteen holes, 25 cents for nine holes. In addition to these and a

number of public, privately owned courses, there are the Indianapolis Country Club, Woodstock Country Club, Meridian Hills Country Club, Broadmoor Country Club, and Hillcrest Country Club.

#### OTHER MEETINGS

At the time of our own convention, Indianapolis will entertain meetings of the Indiana Association of Medical Record Librarians, October eighth; the Indiana Hospital Association, October eighth; the Indiana State Association of Health Officers, October eighth and ninth; and the Indiana State Laboratory Directors, October eighth and ninth.

#### ROUTES

Highways into Indianapolis are No. 52, northwest and southeast; No. 40, east and west; No. 31, north and south; No. 3, west.

Indianapolis is served by the Pennsylvania, Big Four, Monon, and Baltimore & Ohio railroads.

#### ENTERTAINMENT

The first recreational feature will be the golf tournament, Tuesday morning, October ninth. Tuesday afternoon the trap shooting tournament will take place at the Indianapolis Gun Club. Tuesday afternoon the ladies will be privileged to attend a Foster Hall



WORLD WAR MEMORIAL

program of music. Tuesday evening the stag party at the Indianapolis Athletic Club will entertain the men and a buffet supper bridge party at the Indianapolis Athletic Club will keep the women busy. Luncheons for ex-service men, fraternities, etc., will be held in the special dining rooms of the Claypool Hotel, Wednesday noon. The breakfast meeting of the Woman's Auxiliary will be on the fourth floor of the Columbia Club, Wednesday morning. A style show and tea will entertain the ladies in the auditorium of L. S. Ayres, Wednesday afternoon. Women physicians will have their own dinner meeting Tuesday evening at the Propylaeum. Wednesday evening, annual banquet, Claypool Hotel.

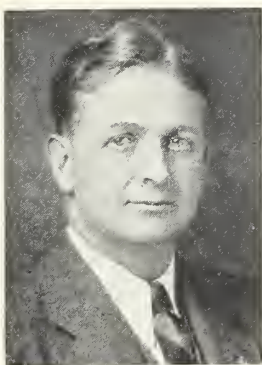


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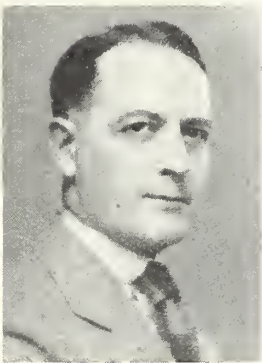
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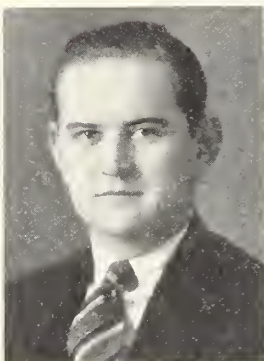
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## ANNOUNCEMENTS

MEMBERS of the House of Delegates are reminded that the first meeting of the House will be held at 4:00 o'clock in the afternoon, Tuesday, October ninth, in the Riley Room of the Claypool Hotel.

WEAR the official badge which you will receive when you register.

PLEASE have your pocket cards with you to avoid delay in registration. If you have paid your dues only recently and have not yet received your membership card, present a receipt from your county secretary and you will be permitted to register.

ESSAYISTS, please remember that all papers presented before the sessions of the Association become the property of the Association and, therefore, are not to be published or submitted for publication elsewhere than in THE JOURNAL of the Indiana State Medical Association.

COUNCILORS will have their first meeting in a special room of the Claypool Hotel at 2:00 p. m., Tuesday, October ninth.

THE annual banquet will be served in the Riley Room of the Claypool Hotel at 7:30 Wednesday, October tenth. Dr. James S. McLester, of Birmingham, Alabama, President-elect of the American Medical Association, will be the principal speaker.

REGISTER immediately upon your arrival. Registration desk will be on the mezzanine floor of the Claypool Hotel.

### FRATERNITY AND CLASS MEETINGS

FRATERNITY and class get-togethers and ex-service men's dinners will be given Wednesday noon, October tenth, in the special dining rooms of the Claypool Hotel.

THE 1909 class of the Indiana University School of Medicine will celebrate its twenty-fifth anniversary Wednesday noon, October tenth, at 12:30 p. m., at the Lincoln Hotel. A turkey dinner will be served. Dr. Herman Morgan will be toastmaster.

PHI RHO SIGMA fraternity will have a luncheon meeting Wednesday noon at the Claypool Hotel. Tickets will be available at the registration desk on the mezzanine floor.

### LABORATORY MEN

MEMBERS of the Indiana Laboratory Association will meet Wednesday, October tenth, at 12:15, for a luncheon in the Claypool Hotel. Members will meet in the lobby.

### PEDIATRICIANS

THERE will be a meeting Wednesday, October tenth, at 6:00 o'clock p. m., in the Claypool Hotel, at which time an organization plan for the pediatricians of the state will be presented. Those men who are limiting their practices to pediatrics, or who are especially interested in pediatrics, are urged to attend. At this meeting, officers will be elected and a constitution and by-laws will be presented. The meeting will be adjourned in plenty of time to allow members to attend the annual banquet in the Riley Room at 7:30 p. m.

### WOMAN'S AUXILIARY

The Woman's Auxiliary to the Indiana State Medical Association will hold its breakfast meeting at 9:00 a. m., Wednesday morning, October tenth, in the Columbia Club, fourth floor.

### TRAP SHOOTING TOURNAMENT

Full details of the trap shooting tournament were published in the August issue of THE JOURNAL. Do not forget it—Indianapolis Gun Club grounds, at two o'clock Tuesday afternoon, October ninth. Dr. L. A. Ensminger, Indianapolis, is chairman of this committee and will be glad to give you any information that you may wish.

### COUNTY MEDICAL SOCIETY OFFICERS

COUNTY medical society presidents and secretaries are invited to attend the first meeting of the House of Delegates, at 4:00 o'clock on Tuesday afternoon, October ninth, in the Riley Room of the Claypool Hotel. County society officers will have no power to vote, but are invited to attend because of the many matters of interest to society officers which probably will be discussed at that time.

### INDIANAPOLIS HOTELS AND RATES

Name and Location	Number of rooms	Rates
ANTLERS	250, all	Single, \$2.00 to \$3.50
750 N. Meridian St.	with bath	Double, \$3.50 to \$6.00
CLAYPOOL	600, all but	Single, \$2.00 to \$6.00
Wash. and Illinois Sts.	a few with bath	Double, \$4.00 to \$8.00
ENGLISH	250, 150	Single, \$1.00 to \$3.00
Monument Circle	with bath	Double, \$2.00 to \$4.00
HARRISON		Single, \$2.00 to \$4.00
51 N. Capitol		Double, \$3.00 to \$6.00
LINCOLN	400, all	Single, \$2.25 to \$6.00
117 W. Washington St.	with bath	Double, \$3.75 to \$8.00
LOCKERBIE	225, all	Single, \$2.00 to \$2.50
123 S. Illinois St.	with bath	Double, \$3.00 to \$3.50
MAROTT	70 apts.,	Twin beds, \$4.00 to \$4.50
2625 N. Meridian St.	accommodating 250	Single, \$2.00 to \$4.50
		Double, \$3.00 to \$6.00
SEVERIN	400, all	Single, \$2.00 to \$4.00
201 S. Illinois St.	with bath	Double, \$3.50 to \$7.00
SPENCER	200, 100	Single, \$1.25 to \$1.75
248 S. Illinois St.	with bath	Double, \$2.25 to \$2.75
SPINK-ARMS	400, all	Single, \$2.50 to \$5.00
410 N. Meridian St.	with bath	Double, \$4.00 to \$8.00
WASHINGTON	300, most of	Single, \$1.50 to \$4.00
34 E. Washington St.	them with bath	Double, \$3.50 to \$5.50

# OFFICIAL PROGRAM OF THE ANNUAL SESSION OF THE INDIANA STATE MEDICAL ASSOCIATION

Claypool Hotel, Indianapolis, Indiana

October 9, 10, 11, 1934

(Schedule will be carried out on Central Standard Time)

**Monday Evening October 8, 8:15: Executive Committee Meeting,**  
headquarters office, 1021 Hume Mansur Building,  
Indianapolis.

## TUESDAY, OCTOBER 9, 1934

### MORNING

- 8 a. m. to 6 p. m. Registration on mezzanine floor, Claypool Hotel.
- 8 a. m. to 6 p. m. Opening of scientific and commercial exhibits, mezzanine floor, Claypool Hotel.
- 9:00 a. m. Annual golf tournament. Eighteen holes, low gross and handicap medal play, Highland Golf and Country Club. (Fees, \$2.00, including greens fees and luncheon.)

### NOON

- 12:15 p. m. Golfers' luncheon, Highland Golf and Country Club.

### AFTERNOON

- 2:00 p. m. Council meeting, special room, Claypool Hotel.
- 2:00 p. m. Annual meeting of Child Health District Chairmen, Claypool Hotel.
- 2:00 p. m. Annual trap shooting tournament, Indianapolis Gun Club grounds.
- 4:00 p. m. Meeting of the House of Delegates, Riley Room Claypool Hotel.

County medical society presidents and secretaries are invited to attend the first meeting of the House of Delegates, at four o'clock on Tuesday afternoon, October ninth, in the Riley Room of the Claypool Hotel. They will have no power to vote, but are invited to attend because of the many matters of interest to society officers which probably will be discussed at that time.

### EVENING

- 6:30 p. m. Dinner for women physicians, Propylaeum, 1410 North Delaware Street. Dr. Edith Shuman, Dr. Lillian Scheib, and Dr. Florence Falvey, of the Indiana University Hospitals, speakers.
- 7:00 p. m. Buffet supper, smoker and stag party, third floor, Indianapolis Athletic Club. Award of golf prizes; music, dancing, and singing. Radio feature deluxe by Thomas Gibbons Winchell.

## WEDNESDAY, OCTOBER 10, 1934

### MORNING

- 8 a. m. to 6 p. m. Registration continues on mezzanine floor, Claypool Hotel.
- 8 a. m. to 6 p. m. Scientific and commercial exhibits, mezzanine floor, Claypool Hotel.

### GENERAL MEETING, RILEY ROOM, CLAYPOOL HOTEL

- 9:00 a. m. Call to order by E. E. Padgett, M. D., Indianapolis, president, Indiana State Medical Association. Greetings and introduction of president of Indianapolis Medical Society, H. S. Leonard, M. D., by J. W. Carmack, M. D., chairman of General Arrangements Committee.
- 9:10 a. m. Address of welcome by H. S. Leonard, M.D., president, Indianapolis Medical Society.
- 9:15 to 9:45 a. m. E. E. PADGETT, M. D., Indianapolis. President's address, "The State Medical Association as a Factor in Education."

9:45 to 10:15 a. m.



DAVID MACKENZIE

DAVID WALLACE MAC KENZIE, M. D., Clinical Professor of Urology, McGill University Faculty of Medicine, Montreal, Quebec.

Subject: "Mechanical Factors in Renal Infections."

**Abstract:** The three common types of renal infections are briefly reviewed. Their pathology is sketched. The mechanical factors both within and without the urinary tract are discussed. The importance of the mechanical agencies in the etiology of renal infections is stressed, and the author desires to emphasize the fact that such etiological factors have their incipency in early life, during infancy and childhood. Prophylactic treatment can be most successfully carried out during these early years. Conservative plastic surgery of the kidney in the more advanced cases is discussed.

10:15 to 10:45 a. m.



ISIDOR RAVDIN

ISIDOR S. RAVDIN, M. D., Professor of Surgery, University of Pennsylvania School of Medicine, Philadelphia, Pa.

Subject: "Problems of Acute Appendicitis."

**Abstract:** The mortality of appendicitis based on vital statistics has increased in the last two decades, although the operative mortality in selected series has decreased. Regardless of the method of computation, the mortality is still too high. The relation of the patient, the general practitioner and the surgeon to this mortality will be reviewed. A sharp line should be drawn between what is frequently diagnosed as "chronic appendicitis" and acute lesions of the appendix. Some factors associated with diagnosis, preoperative preparation, time of operation, operation and the postoperative treatment will be discussed. The author's results will be reported as a means of gauging the effectiveness of the method of treatment.

10:45 to 11:15 a. m. ROBERT A. STRONG, M. D., Professor of Pediatrics, Tulane University of Louisiana School of Medicine, New Orleans, La.

Subject: "Erythroblastic Anemia of Childhood."



ROBERT A. STRONG

**Abstract:** In the past twelve years two diseases of the blood, which have enough distinctive characteristics to justify their being regarded as clinical entities, have been described. This raised the question as to whether or not the existing classification of blood diseases was sufficient to meet the requirements of our progressing knowledge of hematology. One of these diseases concerned infants and young children entirely and was described by Dr. Thomas B. Cooley, who reported 5 cases which presented many features similar to the anemia known up to that time as von Jaksch's. In all of the children the condition was like von Jaksch's anemia in that it began in infancy with a moderate degree of anemia, pronounced splenomegaly, leukocytosis of a varying degree, many normoblasts and a normal or increased fragility to salt solutions. The disease was essentially chronic and in most instances there was no apparent reason for the grave secondary anemia.

In subsequent studies of Cooley and others it was soon found that this form of anemia presented pathognomonic signs which had not been previously mentioned in any anemia. In addition to the blood changes there were typical changes in the physical appearance and in the roentgenologic shadows of the bone. In the blood the outstanding feature is the abnormal number of erythroblasts which seem to increase after splenectomy which so far has been the only encouraging therapeutic measure used. For this reason it has been designated "erythroblastic anemia of childhood" and it is as interesting as it is perplexing. It therefore offers a fascinating opportunity for study and for the purpose of stimulating interest in it a review of our existing knowledge illustrated with slides from two cases under current observation is presented.



11:15 to 11:45 a. m.

EMIL NOVAK, M. D., Associate Professor of Gynecology, Johns Hopkins Medical School, Baltimore, Maryland.



EMIL NOVAK

Subject: "Endocrine Aspects of Gynecology."

**Abstract:** The importance of at least an elementary knowledge of endocrinology to those treating gynecological patients is stressed, because of the more intelligent approach to these problems rather than from the standpoint of organotherapy, admittedly still very unsatisfactory. After sketching the physiology and endocrinology of the normal cycle, there is a discussion of the endocrine mechanisms involved in amenorrhea, functional uterine bleeding, dysmenorrhea, and sterility. What is sound and rational in organotherapy and what is unsound and perhaps absurd will be reasonably clear to the physician who has taken the trouble to learn something of female endocrinology.

## WEDNESDAY NOON

12:15 p. m.

Meeting of Legislative Committee, Indiana State Medical Association, at the Association Headquarters Room, Claypool Hotel.

12:30 p. m.

Fraternity, class and ex-service men's lunches and get-togethers, special dining rooms, Claypool Hotel, and clubs in the city.

## WEDNESDAY AFTERNOON

## SECTION MEETINGS

## Medical Section

Chairman, C. J. CLARK, Indianapolis  
Vice-Chairman, B. S. CORNELL, Fort Wayne  
Secretary, A. S. GIORDANO, South Bend  
(Mezzanine Floor, Claypool Hotel)

2:00 to 2:20 p. m.

RUSSELL S. HENRY, M. D., Indianapolis.

Subject: "Recent Advances in the Treatment of Pulmonary Tuberculosis."

**Abstract:** One of the most important steps in the treatment of pulmonary tuberculosis is to discover the disease early. In many cases, we can discover the disease before physical signs are had. An x-ray of the chest should be taken on every individual who presents any suspicious symptoms. No case of pulmonary tuberculosis can be intelligently treated without x-ray observation as to type or types of lesions present, presence and location of cavities, and the mechanics of the chest to be taken into consideration in mapping out a program of treatment.

Early cases should be given a trial of at least six weeks to two months to show improvement. If no improvement is had, they, as most of the cases of longer standing, should be considered for collapse therapy, viz., artificial pneumothorax, extra pleural apicectomy, phrenicectomy or partial or complete thoracoplasty. Collapse therapy is instituted to facilitate rest to the affected lung or in some cases both lungs, to close cavities and to correct the altered mechanics of the chest. Artificial pneumothorax is the procedure of choice if not prevented by pleural adhesions. If adhesions prevent collapse, intra-pleural pneumolysis may be performed in some cases to permit the lung to collapse with artificial pneumothorax. Extra pleural apicectomy is not used as much as a few years ago. Phrenicectomy is a valuable procedure in selected cases but it has been too widely used. The technique of thoracoplasty has been improved until it is considered as an unusually safe and effective procedure. The location and types of lesions determines the type of thoracoplasty. The surgical treatment must be followed by the regular rest treatment since healing really begins at the time of surgical collapse.

2:20 to 2:40 p. m.

FOSTER J. HUDSON, M. D., Indianapolis.

Subject: "The New-Born Infant: Its Hazards and Care."

**Abstract:** Changes in our ideas as to resuscitation methods, including a consideration of the effects of drugs and anesthetic upon the infant. Differential diagnosis between simple apnea, asphyxia and hemorrhage is important to successful treatment.

Relations of miedlesom obstetrics and fetal injuries; some thought should be placed upon the ultimate effect of the first nervous stimuli upon the child's later habits.

Certain maternal diseases and conditions commonly predispose to some types of birth injury. The condition of the fetus following the prolonged labor, the difficult forceps labor, the cesarean baby.

Some of the more common and recent pieces of apparatus necessary for adequate care and treatment of new born conditions are discussed.

2:40 to 2:55 p. m. Discussion.

2:55 to 3:15 p. m.

HAROLD D. LYNCH, M. D., Evansville.

Subject: "Infant Feeding Simplified."

**Abstract:** Large numbers of infants are underfed because of the extensive use of antiquated tables and rules for the dilution of cow's milk.

Attention is called to a simple, on-technical method of calculating adequate milk mixtures for normal infants. The use of acidified milks, alkalized milks and of boiled, dried and evaporated milks is discussed. The necessity of the early administration of accessory foods is pointed out.

3:15 to 3:35 p. m.

J. A. PARRAMORE, M. D., Crown Point.

Subject: "Diagnosis of Chronic Non-Tuberculous Lung Infections."

**Abstract:** Non-tuberculous chronic lung infections and infections in the upper air passages are relatively common and must be differentiated from pulmonary tuberculosis. They closely simulate this condition in symptomatology, physical signs, clinical manifestations and x-ray chest findings. The differential diagnosis is highly important and very often not a simple matter.

In considering the possibility of sinus infection, the air passages are investigated and an x-ray examination is made. Repeated physical examinations and x-ray examinations, with observation over a period of time may be necessary, as the symptoms, signs and often the results of the x-ray examination closely resemble pulmonary tuberculosis. Under observation the basal rales, which are often found, prove transient. A real toxemia is lacking, temperature is normal, and the pulse is not elevated. A contrary condition is found in tuberculosis, the pulse nearly always being rapid and unstable, and the temperature elevated and out of proportion to the existing fever. Repeated sputum examinations should be done. In young individuals the tuberculin test will often rule out tuberculosis. The red cell sedimentation rate is of some value.

Bacterial infections of the lung caused by the influenza bacillus, streptococcus or diplococcus are frequently confusing; a history of a few days illness after which patient is able to resume work, but with a persistent cough and failure to return to former well being. The temperature and pulse are slightly elevated, sputum negative, signs show moist rales at one or both bases and x-ray reveals nothing, or scattered areas of soft density or cloudiness at the bases. Rest is usually curative or the course may progress into a true bronchiectasis.

Bronchiectasis is the most frequent chronic lung infection next to tuberculosis. The case presenting the typical text book picture is not difficult to diagnose. The mild form, however, such as may follow whooping cough, pneumonia, influenza, or may appear in the course of a chronic sinus infection is not apparent without careful study, observation of the pulse and temperature, physical examination, x-ray and lipiodol injection.

Abscess of the lung in the acute stage is not difficult to diagnose. The history is illuminating, it is always secondary to infection or a surgical procedure, patient has chills, high temperature and paroxysms of coughing, producing quantities of foul smelling pus. An x-ray examination shows a definite lesion.

The chronic case is frequently seen in clinics and has persisted over a long period of time. Patient is not acutely ill but never well. He frequently has an annoying cough with some foul sputum. The histories of these cases is the most important factor in making a diagnosis. Physical examination and x-ray are helpful but not conclusive.

Case histories and x-ray films will be presented.

3:35 to 3:50 p. m.

Election of Section Officers.

3:50 to 4:10 p. m.

O. A. TURNER, M. D., Madison.

Subject: "The Nervous Patient."

**Abstract:** A large percentage of all patients have functional disturbance of the nervous system. Doctors of the previous generation studied their patients as well as their diseases. Modern medicine lays emphasis on physical and laboratory diagnosis neglecting study of patient's personality. Only 16% of medical schools have adequate training in neuropsychiatry. Present doctors have insufficient training.

Heredity is an important factor.

The severity and complexity of functional nervous diseases show a wide variation. The mechanism of the neuroses must be studied and the conflict in the subconscious mind discovered. Such factors as fear, anxiety, and suggestibility play an important part.

All patients must be studied from both the physical and the mental and nervous point of view. Physical and laboratory examination must be thorough. History must be complete both as to the development of physical symptoms and as to the family and social relations and personality of the patient.

The family physician can greatly aid in the patient's readjustment by uncovering and explaining the causes of the functional disturbance. The psychoanalyst with adequate training is needed to solve the more complex psychoneuroses.

4:10 to 4:30 p. m.

C. A. BISHOP, M. D., South Bend.

Subject: "Value of Radioscopy in Heart Disease."

**Abstract:** Reasons are given for believing that by roentgen examination of patients with heart disease, a more accurate measurement of the size of the heart is obtained than by the usual physical examination. Orthodiagraphy, teloradiography, and fluoroscopy are described. Simple screening is probably the most common and the most valuable method. Examination of the heart in the three usual positions, anteroposterior, right oblique and left oblique, is explained. Helpful service given by the roentgen ray, in the diagnosis of certain pathological conditions, in congenital and acquired lesions, is described. This will be illustrated by lantern slides of normal and pathological heart shadows.

4:30 to 4:50 p. m. H. L. MURDOCK, M. D., Fort Wayne.  
Subject: "Influence of Medicine on Life Expectancy."

**Abstract:** First—What medicine has done in the control of the acute infectious diseases; second—infant mortality now as compared to 1900; third—adult mortality now as compared to 1900; fourth—what medicine is doing in the degenerative diseases, namely, cancer, cardio-renal and diabetes; fifth—points of interest on the mortality of tuberculosis, appendicitis and respiratory diseases.

4:50 to 5:10 p. m. ALLEN C. NICKEL, M. D., Bluffton  
Subject: "Value of Oxygen Therapy in Medicine."

**Abstract:** This paper deals with a brief discussion of the different clinical conditions in which oxygen therapy is of value. Oxygen therapy is of value in any condition causing anoxemia. Pulmonary edema and pneumonia are encountered most frequently; other conditions met with are anoxemia associated with cardiac disease, carbon monoxide poisoning, post-operative shock, etc. The latter half of the paper deals with practical points needed in actually running a tent. Most doctors can easily learn the technic and should know how but are usually hesitant about trying to learn. Every doctor should consider it his duty to know how to run an oxygen tent.

5:10 to 5:20 p. m. Discussion.

### Surgical Section

Chairman, H. C. RAGSDALE, Bedford  
Vice-Chairman, DON CAMERON, Fort Wayne  
Secretary, W. C. REED, Bloomington  
(Mezzanine floor, Claypool Hotel)

2:00 to 2:20 p. m. R. B. SMALLWOOD, M. D., Bedford.  
Subject: "Hernia Through the Foramen of Winslow."

**Abstract:** Case report. Operation, autopsy, summary, and notes.

2:20 to 2:25 p. m. Discussion: John R. Phillips, M. D., Michigan City.

2:25 to 2:45 p. m. J. F. WYNN, M. D., Evansville.  
Subject: "Pelvic Varicosities."

**Abstract:** A survey of the literature reveals three things: (1) the scarcity of written materials; (2) the marked similarity of articles; (3) the unsatisfactory results obtained from both medical and surgical treatment.

There are usually two ovarian veins on each side. Those on the left side enter the renal vein at a right angle, while those on the right enter the inferior vena cava at an acute angle. A valve protects those on the right at this emptying point.

Most writers are of the opinion that there are more varicosities present on the left side, because of the lack of a valve, but in over one hundred cases, I have found broad ligament varicosities to be worse on the right. In a previous article I said that the appendix was the causative factor here, but after further study, I am convinced that pregnancy is the cause.

There are no diagnostic symptoms. Probably the most common is backache and a heavy pain in the abdomen. The diagnosis is hardly ever made certain before operation. As to treatment, I remove the tubes in every case, and correct any other pathology present, and anchor the uterus forward. Ligating the veins, and removing them is a bloody and unsatisfactory procedure.

2:45 to 2:55 p. m. Discussion: Pierce MacKenzie, M. D., Evansville.

2:55 to 3:15 p. m. R. C. OTTINGER, M. D., Indianapolis.  
Subject: "Vaginal Hysterectomy."

**Abstract:** Vaginal hysterectomy long known to surgery. Earliest surgical removal of uterus by vaginal route was first suggested by Soranus in the fifth century. Barenarius of Bologna (1507) first to surgically remove uterus vaginally according to Senn. Wrisberg (1787), Osiander (1801) following Wrisberg's teachings, did nine vaginal hysterectomies up to 1808. Langenbeck (1813) performed vaginal hysterectomy much as it is done today without anesthetic or any knowledge of antiseptics. Recamier (1829) was the first French surgeon to do vaginal hysterectomy. After Recamier's time operation was abandoned. Pean (1875-1880) renewed this type of surgery. From 1890 to 1900 controversy existed between laparotomists and vaginalists as to best method of approach to pelvis. Description of early operation.

Babcock believes mortality practically eliminated by vaginal hysterectomy. Horsley recommends vaginal hysterectomy for beginning cancer of the cervix, persistent bleeding, badly diseased cervices. Green-Armytage does vaginal hysterectomies for small fibroids and for prolapse.

The author's indications for vaginal hysterectomy are given.

Technic differs with individual operators according to the operator's particular style of reconstruction. Various technics are described. The author's technic is described.

3:15 to 3:25 p. m. Discussion: T. B. Noble, Sr., M. D., Indianapolis.

3:25 to 3:30 p. m. Election of section officers.

3:30 to 3:50 p. m. W. C. MOORE, M. D., Muncie.  
Subject: "Thoracic Surgery."

**Abstract:** Because of the greater interest taken in the early diagnosis of tuberculosis in school children, great responsibility is placed on the medical profession for proper treatment. Especially is this true in the smaller sanatoria and hospitals. Collapse therapy has increased until about 75% of tuberculous patients are getting it in the larger centers. The accepted procedures are given:

1. Pneumothorax.
2. Extrapleural Pneumolysis.
3. Phrenic Exeresis with Scalenotomy.
4. Extrapleural Thoracoplasty.
5. Technique in Scalenotomy and Thoracoplasty briefly given.

3:50 to 4:00 p. m. Discussion: J. H. Stygall, M. D., Indianapolis.

4:00 to 4:20 p. m. LYMAN K. GOULD, M. D., Fort Wayne.  
Subject: "Gallbladder Disease Simulating Angina Pectoris."

**Abstract:** While referred abdominal pain in angina pectoris is very generally considered in the differential diagnosis of the acute upper abdomen, the likelihood of disturbance in the gallbladder giving rise to symptoms referable to the heart is by no means as universally recognized as it should be. The innervation of the gallbladder will be illustrated, and it will be shown how pathology here might set up impulses which can thus be projected into sensory zones not usually affected by disease in this region. Cases will be presented showing this diagnostic confusion and the points to be considered in the differential diagnosis.

The following conclusions are to be drawn from this study:

1. The patient with a diseased gallbladder previous to any symptoms of cholecystitis with or without stones, may present symptoms of early heart failure or angina pectoris or both.
2. Angina pectoris may be accentuated by a diseased gallbladder.
3. A number of these patients are cured or improved by cholecystectomy.
4. Where the diagnosis has been accurately made, the patient should not be deprived of surgery on the basis of heart symptoms.

4:20 to 4:30 p. m. Discussion: Robert M. Moore, M. D., Indianapolis.

4:30 to 4:50 p. m. HAROLD TRUSLER, M. D., Indianapolis.  
Subject: "Results in Plastic and Reconstructive Surgery."

**Abstract:** The field of plastic surgery includes many very difficult problems. Those of chief importance may be grouped as follows:

1. Treatment of burns and reconstruction of burn scar deformities.
2. Repair of congenital defects such as cleft lip and palate.
3. Surgical treatment of malignancies of the head and neck.
4. In general, any surgical condition involving correction of cosmetic as well as functional distortions.

The technical procedures and methods by which these problems are attacked will be discussed in conjunction with lantern slides illustrating results which may be obtained.

4:50 to 5:00 p. m. Discussion: E. L. Lingeman, M. D., Indianapolis.

5:00 p. m. General discussion of preceding papers.

### Section on Ophthalmology and Otolaryngology

Chairman, J. R. GILLUM, Terre Haute  
Vice-Chairman, C. NORMAN HOWARD, Warsaw  
Secretary, RAYMOND CALVERT, Lafayette  
(Mezzanine floor, Claypool Hotel)

2:00 to 2:20 p. m. K. L. CRAFT, M. D., Indianapolis.  
Subject: "Allergy in Otolaryngology."

**Abstract:** It is not the purpose of this discussion to consider the field of allergy in its relation to general systemic conditions, but to touch upon a few of those phases of this new field of specialization which fall directly within our own limited boundaries of otolaryngology.

A list of conditions of frequent allergic origin which the otolaryngologist may be called upon to consider will include asthma, angioneurotic edema of lip or tongue, eczema of the external ear or nares, migraine and rhinitis, subacute and chronic.

The paper will include a consideration of the etiology of the above conditions and a classification of their causes; and also a comparison of true, seasonal hay fever or pollinosis with perennial hay fever, or vaso-motor rhinitis, one of the conditions seen most frequently by the rhinologist. Treatment of allergic and simulative non-allergic nasal pathology will be described:

- a. Surgical: Indications and contraindications.
- b. Non-surgical: Migraine, pollinosis; vasomotor rhinitis.

Case reports

2:20 to 2:30 p. m. Discussion: J. W. Carmack, M. D., Indianapolis.



2:30 to 2:50 p. m. B. J. LARKIN, M. D., Indianapolis.  
Subject: "Ophthalmologic Aspect of Allergy."

**Abstract:** Two European observers, Arthus of France and Uhlenhuth of Germany, in 1903, published the results of experiments in the injection of proteins and the production of allergic reaction in the eyes of animals. Their discoveries received wide attention among European ophthalmologists but less by Americans until twenty years later when Fort of Georgia and Townsend of Charleston, N. C., observed the seasonal incidence of vernal catarrh and its resemblance to such conditions as asthma and hay fever. They began to make skin tests to attempt to establish immunity by the methods then being employed in conditions known to be due to protein sensitization. As late as 1931 Louis Lefffeld of Philadelphia tentatively put forth the same conception.

Considering this rather meager clinical evidence in the light of general medical knowledge, we must turn to the general principle that disease, in its widest sense, arises not from some localized lesion, but rather from alterations in the physical and chemical reactions of the body fluids.

2:50 to 3:00 p. m. Discussion: E. M. Shanklin, M. D., Hammond.

3:00 to 3:20 p. m. F. McKAY RUBY, M. D., Union City.  
Subject: "Malignancy Engrafted on Actinomycosis: Case Report."

**Abstract:** Malignancy of the mouth and cheek usually follows a history of previous irritation from an infection or trauma. The latter alone is questioned. The case reported had all the known predisposing factors but it was not until actinomycosis started the swelling and thickening of the tissues that the malignancy was discovered.

The patient has done well on conservative treatment and is alive after fifteen months. The advisability of radical versus conservative treatment is discussed. The case is interesting from the developmental sequence.

3:20 to 3:30 p. m. Discussion: C. G. Culbertson, M. D., Indianapolis.

3:30 to 3:50 p. m. B. W. EGAN, M. D., Logansport.  
Subject: "Etiology and Treatment of Iritis."

**Abstract:** Etiology: Syphilis; tuberculosis; focal infections; relation of allergy to focal infection.

Treatment: Generally local; non-specific protein.

3:50 to 4:00 p. m. Discussion: C. J. Adams, M. D., Kokomo.

4:00 to 4:20 p. m. W. E. STEWART, M. D., Terre Haute.  
Subject: "Treatment of Laryngeal Tuberculosis."  
(No abstract supplied.)

4:20 to 4:30 p. m. Discussion: D. O. Kearby, M. D., Indianapolis.

4:30 to 4:50 p. m. ROBERT SMITH, M. D., Crawfordsville.  
Subject: "Morax-Axenfeld Conjunctivitis."

**Abstract:** Morax-Axenfeld conjunctivitis is a specific disease diagnosed readily with smears from the eyes. It is not a self-limiting disease, and often runs a chronic course with symptoms that frequently are ascribed to eye-strain. Many patients are repeatedly refracted without relief. Condition clears up promptly with use of zinc salts.

4:50 to 5:00 p. m. Discussion: C. L. Robinson, M. D., Frankfort.

5:00 p. m. Election of section officers.

### WEDNESDAY EVENING

7:30 p. m. ANNUAL BANQUET, RILEY ROOM,

### CLAYPOOL HOTEL.

Presiding officer, E. E. Padgett, M. D., president, Indiana State Medical Association.

Speaker: JAMES S. McLESTER, M. D., Birmingham, Alabama, President-elect, American Medical Association.

Subject: "Borderline States of Nutritional Failure."



JAMES S. McLESTER

### THURSDAY, OCTOBER 11, 1934

7:00 a. m. House of Delegates breakfast meeting, Claypool Hotel. Annual election of officers and selection of convention city for 1935. Meeting of Council immediately following adjournment of House of Delegates, Claypool Hotel.

8 a. m. to 12 noon. Registration continues on mezzanine floor, Claypool Hotel.

8 a. m. to 12 noon. Scientific and commercial exhibits, mezzanine floor, Claypool Hotel.

### GENERAL MEETING, RILEY ROOM, CLAYPOOL HOTEL

9:00 to 9:30 a. m. LUCIUS E. BURCH, M. D., Professor of Clinical Gynecology, Vanderbilt University School of Medicine, Nashville, Tennessee.



LUCIUS E. BURCH

Subject: "The Diagnosis and Treatment of Uterine Bleeding."

**Abstract:** The author has endeavored to bring before the general practitioners of the State of Indiana the diagnosis and treatment of the common causes of uterine bleeding. A special effort has been made to emphasize the medical treatment for these conditions with little stress on surgical procedures.

The majority of these cases do not demand surgery and for this reason a rational method of procedure and treatment has been outlined that the general practitioner can use at the bedside or in the routine office work.

9:30 to 10 a. m. WALTER M. SIMPSON, M. D., Director, Diagnostic Laboratories, Miami Valley Hospital, Dayton, Ohio.



WALTER SIMPSON

Subject: "Undulant Fever (Brucelliosis)."

**Abstract:** Undulant (Malta) fever is now known to be a common and widely distributed disease in this country. The discovery that the organism of contagious abortion of cattle and swine produces a disease of human beings indistinguishable from the Mediterranean type of Malta fever provided American physicians with an explanation for their inability to arrive at a confirmed diagnosis in many cases of typhoid-like or malaria-like diseases. The importance of undulant fever as a rapidly developing public health problem is vividly indicated by recent experiences in the United States.

Prior to 1927 the few sporadic cases were regarded as clinical curiosities. During 1929, 1,301 cases were encountered, with cases reported from every state of the Union. During the past three years, 4,336 cases have been officially recorded. Among urban populations the disease is transmitted chiefly through the ingestion of raw milk containing Brucella organisms. The skin may act as a portal of entry for farmers, butchers and veterinarians. The majority of persons with undulant fever present a characteristic clinical picture; this will be described in some detail. Until veterinarians have overcome the disease at its source, pasteurization is the only logical method for the prevention of milk-borne infection. The Brucella melitensis (abortus) vaccine is apparently of value as a therapeutic agent.

10 to 10:30 a. m. RALPH A. FENTON, M. D., Clinical Professor and Head of the Department of Otolaryngology, University of Oregon Medical School, Portland, Oregon.



RALPHA. FENTON

Subject: "Modern Views about Nasal Infections."

**Abstract:** Persistence of ancient notions regarding nasal disorders. Misunderstanding of nasal anatomy and physiology until recent years, responsible for douches, sprays, the cautery, destructive surgery and indiscriminate use of vaccines.

Nasal and sinus secretions, lining membranes and nerve supply. Intimate relationship with other body systems. Reasons for improper or arrested nasal defense functions: extrinsic conditions; intrinsic conditions, local and general.

The role of allergy in nasal disease; its detection and management. What happens in acute sinus inflammation: how and why it becomes chronic; local and general consequences of sinus disease. Relative importance of sinuses, teeth, tonsils, as sources of focal infection. End results: ozena, bronchitis and bronchiectasis, gastrointestinal complications, cranial neuralgias, arthritis, etc.

Prophylaxis, differential diagnosis, and management of sinus disease. General methods: diet and its limitations; bacteriological and chemical agents; physical agents. Reasons for and limitations of sinus surgery in children and adults.

Contributions of experimental research to solution of nasal problems. Confusion existing regarding results of virus infections, bacterial invasion, lowered resistance to germs already present, and allergic sensitiveness; careful study required by general practitioner together with specialist.

10:30 to 11 a. m. **GEORGE R. MINOT, M. D.**, Professor of Medicine, Harvard University Medical School, Boston, Mass.



**GEORGE R. MINOT**

Subject: "Some Aspects of Anemia."

**Abstract:** Some considerations of the etiology of anemia; the role of diet and the intestinal tract; the diagnosis, and maintenance treatment of pernicious anemia, including some remarks on the treatment of neural lesions.

11 to 11:30 a. m. **SIR FREDERICK BANTING, K. C. B. E.**,



**FREDERICK BANTING**

Professor of Medical Research, University of Toronto Faculty of Medicine, Toronto, Ontario.

Subject: "Silicosis."

**Abstract:** Recent experimental work on silicosis will be reported in this paper.

11:30 a. m. **FRANK H. LAHEY, M. D.**, Boston, Mass.  
Subject: "The Diagnosis and Management of Thyroid States."



**FRANK H. LAHEY**

**Abstract:** Hyperthyroidism in children; thyroid crises.

Treatment: Typical and atypical hyperthyroidism; hyperthyroidism and diabetes; hyperthyroidism and pregnancy; exophthalmos; hyperthyroidism in relation to blood pressure; association of heart disease and hyperthyroidism; blood cholesterol in hyperthyroidism and hypothyroidism; the danger of malignant degeneration in benign adenoma.

## PROGRAM FOR WOMEN'S ENTERTAINMENT AND WOMAN'S AUXILIARY OF THE INDIANA STATE MEDICAL ASSOCIATION

### TUESDAY, OCTOBER 9, 1934

- 9 a. m. to 6 p. m. Registration on mezzanine floor, Claypool Hotel.
- 2:30 p. m. Visit to Foster Hall and program, Lilly Estate, Indianapolis.
- 7:00 p. m. Buffet supper bridge party, Indianapolis Athletic Club.

### WEDNESDAY, OCTOBER 10, 1934

- 9:00 a. m. Breakfast and annual business meeting, Woman's Auxiliary to the Indiana State Medical Association, 4th floor, Columbia Club.
- Mrs. I. N. Trent, Muncie, president, presiding Program:
- Invocation—Mrs. U. G. Poland, Muncie.
- Address of Welcome—Mrs. J. W. Carmack, Indianapolis.
- Greeting—Message from the National president, Mrs. Robert W. Tomlinson, Wilmington, Delaware, by Mrs. Frank W. Gregor, Indianapolis.

Address—Thurman B. Rice, M. D., Indianapolis.

#### Business:

Report of Secretary, Mrs. F. B. Wishard, Anderson.

Report of Treasurer, Mrs. U. G. Poland, Muncie.

Report of Corresponding Secretary, Mrs. F. M. Gastineau, Indianapolis.

#### Reports of Standing Committees:

Historian, Mrs. J. T. Wheeler, Indianapolis.

Parliamentarian, Mrs. William Tomlin, Indianapolis.

Legislative, Mrs. E. E. Padgett, Indianapolis.

Organization, Mrs. M. A. Austin, Anderson.

Hygeia, Mrs. Joseph H. Clevenger, Muncie.

#### Reports of Auxiliary Presidents:

Madison County—Mrs. George B. Metcalf.

Delaware-Blackford Counties—Mrs. C. M. Mix.

Marion County—Mrs. J. W. Carmack.

Hendricks, Johnson, Morgan, Marion Counties—Mrs. O. T. Scamahorn.

Vanderburgh County—Mrs. M. Ravdin.

Vigo County—Mrs. E. T. Zaring.

Orange County—Mrs. George Dillinger.

Ripley County—Mrs. M. J. Coomes.

Report on Cleveland Convention—Mrs. I. N. Trent.

Report of Nominating Committee.

Election of Officers.

9 a. m. to 6 p. m. Registration on mezzanine floor, Claypool Hotel.

2:30 p. m. Style show and tea, Auditorium, L. S. Ayres and Company.

7:30 p. m. **ANNUAL BANQUET, RILEY ROOM, CLAYPOOL HOTEL.**

Speaker: **JAMES S. McLESTER, M. D.**, Birmingham, Alabama, president-elect, American Medical Association.

Any Day,

10 a. m. to 4 p. m. Informal trip to World War Memorial Shrine. The committee suggests that you make this visit at your convenience as it is very much worthwhile.

Golf will be available for those women who desire to play. Information concerning golf may be obtained at the registration desk.

## SCIENTIFIC EXHIBIT AND MOVING PICTURES

**Ernest Rupel, M. D., Director.**

**Clyde G. Culbertson, M. D., Assistant Director.**

**THOMAS G. HULL**, director, Bureau of Exhibits, American Medical Association, in charge of exhibits I to V inclusive:

- I Activities of the A. M. A.
- II Organization of the A. M. A.
- III Objectionable Cosmetics.
- IV An exhibit on Encephalitis.
- V An exhibit on Hospitals.
- VI **HAROLD M. TRUSLER, M. D.**  
"Plastic Surgery Results."
- VII **F. R. HENSHAW, D.D.S.**, Dean, Indiana University School of Dentistry.
- VIII **MAX A. BAHR, M. D.**, and **WALTER L. BRUETSCH, M. D.**, Central Indiana State Hospital for the Insane.  
"Epidemic Encephalitis (Von Economo Type) and Its Sequelae."



- IX L. A. SMITH, M. D., Chairman Exhibit Committee, Indiana Roentgen Ray Society.
- X UNITED STATES PUBLIC HEALTH SERVICE.  
"Amebiasis."
- XI VERNE K. HARVEY, M. D., Director, Indiana State Board of Health.  
"Public Health and the Doctor."
- XII F. L. RECTOR, M. D., American Society for the Control of Cancer.
- XIII C. B. JORDAN, Dean, and Professor HENRY W. HEINE, Purdue University School of Pharmacy.  
"Drugs producing Granulocytopenia; Other dangerous drugs."
- XIV R. N. HARGER, Ph.D.  
"Drunkometer."
- XV JOHN ERIC DALTON, M. D.  
"Lymphogranulomatosis Inguinale."
- XVI F. S. CROCKETT, M. D.
- XVII PSI IOTA XI.  
"Demonstration of Oxygen Therapy."
- XVIII EDGAR F. KISER, M. D.  
"Rare Medical Books."
- XIX LEON ZERFAS, M. D., Historian, Indiana State Medical Association.  
Presidents and other Medical Leaders.
- XX THE JOURNAL of the Indiana State Medical Association.

## MOVING PICTURES

- I MEAD JOHNSON & COMPANY.  
"The Physiology of Fertilization in the Human Female."
- II PETROLAGAR LABORATORIES.  
"The Science and Art of Obstetrics," by DeLee.
- III HAROLD M. TRUSLER, M. D.  
"Technique in Plastic Surgery."
- IV AMERICAN MEDICAL ASSOCIATION.  
"Activities of the A. M. A. Headquarters."  
Speaker from A. M. A. to accompany the film.
- V THE AMERICAN SOCIETY FOR THE CONTROL OF CANCER.  
The Canti film showing actual cancer cell growth. Also, a film on the life history and growth of cancer.  
Beginning Monday, October 8, 1934, continuing daily to Thursday noon, October 11, 1934.
- No. I 9:00 a. m., and 2:00 p. m.  
No. II 9:40 a. m., and 2:40 p. m.  
No. III 10:20 a. m., and 3:20 p. m.  
No. IV 10:40 a. m., and 3:40 p. m.  
No. V 11:20 a. m., and 4:20 p. m.

## AN INVITATION TO LILLY DEDICATION EXERCISES

Eli Lilly and Company extend a cordial invitation to the members of the Indiana State Medical Association to attend the formal opening of the new Lilly Research Laboratories on the afternoon of Thursday, October 11. An informal luncheon will be served from 12:00 to 1:00 P. M. Following the luncheon the formal exercises will take place at 2:00 P. M. Eli Lilly, president of the company, will act as chairman; J. K. Lilly, chairman of the board of directors, will speak briefly. Dr. Irving Langmuir, Director of Research for the General Electric Company, will deliver an address on "The Unpredictable Results of Research"; Sir Frederick Banting, of the University of Toronto, will speak on "The Early Story of Insulin." The main address of the afternoon will be made by Sir Henry Dale, C.B.E., M.D., F.R.S., Chairman of the National Institute for Medical Research, London, England, and Secretary of the Royal Society of London, who is scheduled to talk on "Chemical Ideas in Medicine and Biology."

The ceremonies incident to the formal opening of this latest addition to the facilities of the Lilly organization are expected to draw a large number of the leading research men of the country to Indianapolis.

## COMMITTEES FOR 1934 SESSION INDIANA STATE MEDICAL ASSOCIATION

## General Arrangements

John W. Carmack, Indianapolis, general chairman

## Finance Committee

William Doeppers, chairman

Wm. N. Wishard, Jr.

John H. Eberwein

O. H. Bakemeier

E. O. Asher

John H. Warvel

## Entertainment Committee

A. F. Weyerbacher, chairman

Cyrus J. Clark

Bert E. Ellis

Rogers Smith

Herman Morgan

Russell J. Spivey

Russell A. Sage

## Banquet Committee

Howard B. Mettel, chairman

Rollin H. Moser

Robert J. Masters

John M. Whitehead

Frank Gastineau

## Lantern Committee

James N. Collins, chairman

C. E. Thompson

J. K. Berman

C. B. Bohner

David L. Smith

## Hotels Committee

Bernard J. Larkin, chairman

James C. Carter

Murray N. Hadley

Norman M. Beatty

John R. Brayton

## Publicity Committee

J. O. Ritchey, chairman

Homer G. Hamer

Oren E. Carter

Ross C. Ottinger

Howard Aldrich

## Transportation Committee

Lehman M. Dunning, chairman

Leon Zerfas

Gordon W. Batman

Paul K. Cullen

Byron K. Rust

## Golf Committee

Chester A. Stayton, chairman

Cleon A. Nafe

C. H. McCaskey

Matthew Winters

W. D. Little

Paul T. Hurt

## Trap Shooting

Leonard A. Ensminger, chairman

Robert J. Kemper

Horace M. Banks

Frank B. Ramsey

## Military Service Committee

Olin B. Norman, chairman

LaRue D. Carter

Louis D. Belden

Henry F. Nolting

Elmer Funkhouser

## Women Physicians

Lillian B. Mueller, chairman

Jane Ketcham

Martha Souter

Frances T. Brown

## Fraternalities and Class

## Reunion Committee

Ernest Rupel

Roy V. Myers

Ralph L. Lochry

John A. M. Aspy

Karl M. Koons

## Registration Committee

Harry L. Foreman, chairman

Lyman R. Pearson

David H. Sluss

Russell R. Hippensteel

G. W. Gustafson

George J. Garceau

Carl Habich

Kenneth L. Craft

Mason B. Light

## Reception Committee

Henry S. Leonard, President Indianapolis Society, chairman

Wm. N. Wishard, Sr.

E. D. Clark

John M. Cunningham

Max Bahr

Thos. B. Noble, Sr.

W. D. Gatch

E. F. Kiser

Wm. H. Kennedy

J. A. MacDonald

A. B. Graham

Frank W. Cregor

Chas. P. Emerson

Wm. P. Garshwiler

Wm. S. Tomlin

Goethe Link

D. L. Layman

O. N. Torian

H. F. Beckman

C. D. Ruddell

W. F. Hughes

C. E. Cottingham

A. S. Jaeger

Wm. F. Clevenger

Henry Alburger

H. R. Allen

George S. Bond

H. H. Wheeler

George S. Row

G. B. Jackson

Thomas J. Dugan

H. K. Langdon

E. M. Amos

M. J. Barry

Thomas J. Beasley

J. H. Gauss

Walter F. Kelly

Thurman B. Rice

All members of the Marion County Medical Society ex-officio members.

Ladies Activities  
The officers and Entertainment Committee of the woman's auxiliary to Indianapolis Medical Society.

## FOR THE GOLFERS!



Highland Golf and Country Club

The Indiana State Medical Association Annual Golf Tournament will be held at Highland Golf and Country Club, Tuesday, October 9, 1934.

Highland is only a short drive from the city. Travel on State Road 29 north and turn right at the first road after crossing the river. Players coming in on State Roads 31 and 67 may reach State Road 29 by crossing the city on Thirty-eighth Street.

The tournament will be eighteen holes, medal play, U. S. G. A. rules, and may be played any time after nine o'clock in the morning.

Bargain prices will prevail—a \$2.00 ticket is good for lunch at the club and the greens fee. All golfers will partake of a free feed and show at the Indianapolis Athletic Club, beginning at 7:00 p. m. The golf prizes will be awarded during the evening.

The greens and fairways at Highland are the finest in the state. The club house is well adapted

to your comfort. The locker rooms will be the scene of friendly greetings and much hilarity.

Prizes in abundance for experts, dubs, beginners and locker room golfers are ready.

The committee assures a perfect course, a fine lunch, plenty of fun, hospitality de luxe, enjoyment for old and young, no lost balls, no slices or hooks, perfect drives, and every putt a "sink."

We want 200 golfers. If you "ever" or "never" played golf—COME!

Handicaps: Only the players who send in the attached blank properly filled in will participate in the handicap tournament. Cut it out, have it certified, or fill it in yourself, and mail at once to the Indiana State Medical Association, 1021 Hume Mansur Building, Indianapolis, Indiana.



### FILL IN THIS:

Dr. ....  
I certify that the club handicap of the above  
doctor is .....

.....  
Club Professional

### OR THIS:

I certify that my five lowest scores for the  
1934 season on a regulation course are

.....  
M. D.

All handicaps subject to revision by committee.



## OFFICIAL CALL TO THE HOUSE OF DELEGATES

The next annual session of the Indiana State Medical Association will be held at Indianapolis, October 9, 10, and 11, 1934.

The House of Delegates will be constituted as follows: Marion County, nine delegates; Lake County, three delegates; Allen County, three delegates; St. Joseph County, three delegates; Tippecanoe County, two delegates; Vanderburgh County, two delegates; Vigo County, two delegates; the other seventy-five county societies, each one delegate; thirteen councilors; the ex-presidents, namely, C. S. Bond, W. N. Wishard, J. C. Sexton, G. W. McCaskey, J. B. Berteling, Joseph R. Eastman, W. H. Stemm, C. H. McCully, W. R. Davidson, E. M. Shanklin, Charles N. Combs, Frank W. Gregor, George R. Daniels, Charles E. Gillespie, Angus C. McDonald, A. B. Graham, F. S. Crockett, and J. H. Weinstein. In addition to these, the president, secretary, and treasurer, all without power to vote except in case of a tie, when the president shall cast the deciding vote.

Blank credentials have been sent by the secretary to each county society, and the properly executed credentials should be mailed to Thomas A. Hendricks, 1021 Hume Mansur Building, Indianapolis, or brought to the session. No delegate will be seated unless wearing the official badge.

The House of Delegates will convene promptly at 4:00 p. m. Tuesday, October 9, in the Riley Room, Claypool Hotel, and again at 7:00 a. m. Thursday morning, October 11, in the Claypool Hotel (breakfast meeting).

The order of business will be as follows:

1. Call to order by the president.
2. Roll call and seating of qualified delegates.
3. Reading of the minutes of previous meetings.
4. Appointment of reference committees.
5. Report of the executive secretary.
6. Report of the treasurer.
7. Report of the chairman of the council.
8. Reports of standing and special committees:
  - a. Credentials.
  - b. Executive.
  - c. Arrangements.
  - d. Scientific Work.
  - e. Legislation and Public Policy.
  - f. Journal Publication Committee.
  - g. Bureau of Publicity.
  - h. Civic and Industrial Relations.
  - i. Medical Education and Hospitals.
  - j. Necrology.
  - k. Secretaries' Conference.
  - l. Graduate Education.
  - m. Diphtheria Prevention.
  - n. Study of Health Insurance.
  - o. Veterans' Hospitalization.
  - p. Study of High School Athletics.
  - q. Public Relations.
  - r. Lye Burns in Children.

- s. Study of Puerperal Mortality.
- t. State Fair.
- u. Mental Health.
- v. Delegates to the A. M. A.
- w. Statistician.
- x. Historian.
- y. Codification of Constitution and By-Laws.
9. Reading of communications.
10. Reading of memorials and resolutions.
11. Unfinished business.
12. New business.
13. Adjournment.

The election of officers will be the first order of business at the second meeting of the House of Delegates. In addition to the regular officers, the terms of the following officers expire December 31, 1934, and their successors must be elected at the session: Delegates to the American Medical Association to succeed H. G. Hamer, Indianapolis, and R. L. Sensenich, South Bend, and alternates, W. F. Kelly, Indianapolis, and E. M. Shanklin, Hammond.

Delegates from the third, sixth, ninth and twelfth districts are reminded that the terms of their councilors will expire December 31, 1934, and new councilors should be elected to succeed the following:

Third District: H. C. Ragsdale, Bedford.

Sixth District: Samuel Kennedy, Shelbyville.

Ninth District: F. T. Romberger, Lafayette.

Twelfth District: E. M. VanBuskirk, Fort Wayne.

Some of these elections already may have been held but they should be reported to the House of Delegates at this session for confirmation.

THOMAS A. HENDRICKS,  
Executive Secretary.

## REPORT OF COMMITTEE ON CREDENTIALS

*House of Delegates, Indiana State Medical Association:*

Gentlemen: Your committee, appointed by the president of the Indiana State Medical Association, to act as the Committee on Credentials, has but little to report at this time. We hope to have every society in the state represented at the state meeting, with properly credentialed delegates.

Respectfully submitted,

GEO. D. MILLER, M. D., Chairman.

J. W. BOWERS, M. D.

P. H. SCHOEN, M. D.

## REPORT OF EXECUTIVE SECRETARY

*House of Delegates, Indiana State Medical Association:*

Gentlemen: Recognition of the problems confronting the average doctor and a program of definite action in attacking them are the demands made today by the profession of Indiana of you gentlemen who compose the House of Delegates.

The physicians of the state are looking as never before toward you who are their chosen representatives for leadership and are hoping in some way that you who make up this body may find a solution for many of their professional and economic troubles and cares. Hence the principles promulgated and the actions taken by the House in this, a session that may prove to be one of the most important in the history of the profession, will determine to a great extent the future course of the Indiana State Medical Association as an organization, and to a greater extent than anyone knows the career of individual members of the profession now in practice and those who will be the future physicians of the country.

From the mass of correspondence and material that has come into the headquarters office during the past year, from the many conferences and conversations with doctors, and from general contact with physicians, your executive secretary can say that now, as never before, the average Indiana doctor is interested in and informed on these problems and is demanding that something definite be done about them by the American Medical Association and the Indiana State Medical Association.

Hence, the success or failure of this present session of the House of Delegates must depend upon the clarity with which the House visualizes these problems and the judgment and initiative it exercises in drawing up a program for meeting them.

These problems are stated definitely in the reports of the various standing and special committees, which should be studied by every doctor in the state, and which, with very few exceptions, have been active, aggressive committees and not mere paper organizations. The plan of action and a record of the progress in meeting these questions as they have arisen also is given in detail in these reports. They are in effect historical accounts of the activities of the state organization during the past year, presenting critical analyses of many important economic, social, governmental, and organization questions which confront the medical profession at the present time. Suggestions for future procedure in many instances are outlined. In some instances, however, no progress has been reported and a frank statement would be, as is the case in some diseases, "At this present time we know of no cure and can offer no relief to the sufferer."

Despite the serious outlook, it truthfully can be said that the state organization never has been stronger and never faced the future more confidently than today. County and district societies of Indiana have been active and alive to the multiplicity of scientific and economic problems. Standing and special committees are ready to function along the lines you direct, and a smooth running state organization (backed almost 100 per cent by men of the profession who are giving unselfishly without regard to time, energy or money, the best of their intellect and their ability), exists to main-

tain the Indiana State Medical Association as a true leader and carry on as a defender of the profession in order that the doctors of the state may continue to render the high standard of medical service that has been a tradition in Indiana for almost one hundred years.

Gentlemen, we at headquarters await your orders with the keenness of a well-trained, well-conditioned team, set to take the field, keyed to battle to the final whistle.

Respectfully submitted,

THOMAS A. HENDRICKS,  
*Executive Secretary.*

## REPORT OF THE TREASURER

*House of Delegates, Indiana State Medical Association:*

Gentlemen: In accordance with the suggestion approved at the last meeting of the House of Delegates on September 29, 1933, at French Lick, this year's report consists of the combined audit of the Association and JOURNAL accounts made by Haskins and Sells, certified public accountants, at December 31, 1933, the end of the fiscal year of the Association.

It will be noted that the Medical Defense Fund has been separately kept since September 1, 1933. A detailed report on this account is contained in the annual report of the Executive Committee.

January 11, 1934.

Indiana State Medical Association,  
1021 Hume Mansur Building,  
Indianapolis, Indiana.

Dear Sirs:

We have audited your records of cash receipts and disbursements for the five months ended December 31, 1933, and the records of cash receipts and disbursements of THE JOURNAL of the Indiana State Medical Association for the year ended that date and submit the following exhibits, without certificate:

*Exhibit A*—Indiana State Medical Association—Summary of General Cash Receipts and Disbursements for the years ended December 31, 1933, and 1932, and comparison.

*Exhibit B*—THE JOURNAL of the Indiana State Medical Association—Summary of cash receipts and disbursements for the year ended December 31, 1933.

Exhibit A includes amounts as audited by us only for the five months ended December 31, 1933. The amounts set forth for the year ended December 31, 1932, and included for the seven months ended July 31, 1933, with respect to Indiana Medical Association, have been taken from reports of other accountants.

The cash balances at December 31, 1933, were verified by us, and consisted of the following:

Indiana State Medical Association:

Cash on deposit—Indiana National Bank...\$5,964.89

Less 1934 dues deposited but not considered receipts until January, 1934.... 3,339.00

\$2,625.89

Cash on deposit—Bankers Trust Company 200.00

Total .....\$2,825.89

THE JOURNAL of the Indiana State Medical Association—Cash on deposit, Fletcher Trust Company...\$ 71.94

In addition to the foregoing, the Association inaugurated during the year a Medical Defense Fund, allocating thereto a portion of all dues received. This fund is deposited with the American National Bank and at December 31, 1933, as verified by us, amounted to \$217.30.



The net worth of the Association at December 31, 1933, includes, in addition to the foregoing cash balances, the following bonds which were examined by us:

	Face Value
United States Liberty Loan, 4¼%—1933-38.....	\$ 3,000.00
United States Treasury, 4¼%-3¼%—1943-45.....	2,000.00
Indianapolis, Indiana, City Hospital, 4¾%—1941....	1,000.00
Indianapolis, Indiana, City Hospital, 4%—1950.....	1,000.00
Indianapolis, Indiana, City Hospital, 4%—1951.....	4,000.00
Fort Wayne, Indiana, School Improvement, 4½%—1940 .....	5,000.00
Lake County, Indiana, State Highway Aid, 5%—1937	2,000.00
Marion County, Indiana, Flood Prevention, 4¼%—1949 .....	5,000.00
Beachton Court Apartments, Chicago, Illinois, 6%—1938, certificates of deposit dated August 8, 1931..	4,000.00
Rokeby Apartment Hotel, Chicago, Illinois, 6%—1937, certificates of deposit dated January 13, 1932 .....	1,000.00
Total .....	\$28,000.00

The latter two issues of securities are in default of interest. Receipts of interest on the other bonds are set forth in Exhibit A.

Membership dues were collected during the year as follows:

2,680 Regular members, 1933 dues.....	\$18,760.00
10 Regular members, 1932 dues.....	70.00
10 Honorary members, 1933 dues.....	20.00
Total .....	\$18,850.00

We note that the printed dues statements request remittances to be mailed to Mr. Thomas A. Hendricks, Executive Secretary, and that numerous checks received are made payable to him. In order to strengthen the control over collections we suggest that the dues statements be reprinted to request remittances to "Indiana State Medical Association."

Yours truly,  
HASKINS & SELLS.

EXHIBIT A  
INDIANA STATE MEDICAL ASSOCIATION  
SUMMARY OF GENERAL CASH RECEIPTS AND DISBURSEMENTS  
FOR THE YEARS ENDED DECEMBER 31, 1933, AND  
1932, AND COMPARISON

	Year ended December 31, Increase or		
	1933	1932	Decrease
Balance, beginning of year..	\$ 1,556.00	\$ 1,887.18	—\$330.81
Cash Receipts:			
Membership dues .....	\$18,850.00	\$19,040.00	—\$190.00
Postgraduate study .....	86.00	427.50	—\$341.50
Income from exhibits.....	870.00	1,122.50	—252.50
Interest on bank balances.	37.62	113.48	—75.86
Interest on United States government bonds .....	212.50	212.50	
Interest on Indianapolis, Indiana, City Hospital bonds .....	247.50	247.30	.20
Interest on Marion County, Indiana, Flood Prevention bonds .....	212.50	212.50	
Interest on Fort Wayne, Indiana, School Improvement bonds .....	225.00	225.00	
Interest on Lake County, Indiana, State Highway Aid bonds .....	50.00	100.00	—50.00
Indiana State Dental Association .....	2.00	12.00	—10.00
Refund by Journal of the Indiana State Medical Association of 1932 advance .....	32.50		32.50
Total cash receipts....	\$20,825.64	\$21,712.78	—\$887.14
Total .....	\$22,382.01	\$23,599.96	\$1,217.95

Cash Disbursements:

Journal of the Indiana State Medical Association:			
Transfer of applicable portion of dues.....	\$ 5,406.00	\$ 5,716.25	—\$310.25
Loan .....	500.00		500.00
Transfer to Medical Defense Fund .....	217.30		217.30
Executive office expenses..	8,094.66	10,971.87	—2,877.21
Publicity committee .....	395.98	370.66	25.32
Public policy .....	399.76	100.56	299.20
Council .....	160.98	295.75	—134.77
Treasurer's office .....	205.68	150.00	55.68
Annual session .....	1,382.90	1,493.53	—110.63
Miscellaneous committees..	525.54	384.18	141.36
Attorney fees .....	600.00	600.00	
Medical defense expenditures (prior to creation of special fund).....	1,475.00	1,715.00	—240.00
Postgraduate study .....	192.32	245.79	—53.47
Total cash disbursements .....	\$19,556.12	\$22,043.59	—\$2,487.47
Balance, end of year.	\$ 2,825.89	\$ 1,556.37	\$1,269.52

Note: The above statement includes amounts as audited by us only for the five months ended December 31, 1933. The amounts set forth for the year ended December 31, 1932, and the amounts included for the seven months ended July 31, 1933, have been taken from reports of other accountants.

EXHIBIT B  
THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION  
SUMMARY OF CASH RECEIPTS AND DISBURSEMENTS FOR THE YEAR  
ENDED DECEMBER 31, 1933  
Receipts .....\$12,502.98  
Disbursements ..... 12,431.04  
Balance, December 31, 1933.....\$ 71.94  
Respectfully submitted,  
A. F. WEYERBACHER, Treasurer.

REPORT OF THE CHAIRMAN OF THE COUNCIL  
House of Delegates, Indiana State Medical Association:  
Gentlemen: Inasmuch as the November, 1933, and the February, 1934, issues of THE JOURNAL carry in detail the minutes of the Council, only a brief outline of the principal acts of that body during the past year are herewith given by your chairman.

First Meeting, French Lick, September 25, 1933  
The Council convened at the French Lick Springs Hotel at noon with the chairman presiding. The roll call showed all councilors, one councilor-elect, the president, president-elect, treasurer, members of the Executive Committee, and the executive secretary present.

District Meetings  
The councilors were asked to continue their efforts to avoid conflicts in district meetings. This situation is better at the present time than in years past but still several district societies scheduled their spring meetings for the same day.

FERA Arrangements  
The relationship of the medical profession to the National Recovery Act was discussed, along with the plan whereby FERA funds were to be made

available for medical services in Indiana under Federal Emergency Relief Administration Rules and Regulations No. 7.

#### *Editorial Board Election*

Dr. E. M. Shanklin was unanimously re-elected editor of THE JOURNAL for 1934, and Dr. L. P. Harshman was elected to membership on the editorial board to serve five years, starting January, 1934. Dr. Harshman succeeded Dr. Charles N. Combs.

#### *New Charter for Madison County Medical Society*

As the original charter had been lost, a new charter was given to Dr. M. A. Austin, councilor of the Eighth District, for presentation to the Madison County Medical Society.

#### *Change of Meeting Date*

The Council authorized the preparation of a resolution to the House of Delegates recommending that the date of the annual session be set later in the year in order to avoid the excessive heat that often prevails in September.

#### *Second Meeting, French Lick, September 27, 1933*

Meeting called to order by the chairman immediately upon adjournment of the final meeting of the House of Delegates. Roll call showed eight councilors along with ex-officio members present.

Report made that the House of Delegates had acted favorably upon the resolution in regard to changing the date of the annual session. The Executive Committee was authorized to decide upon the definite dates.

#### *Midwinter Meeting, Indianapolis, January 14, 1934*

All thirteen members of the Council, the retiring president, incoming president, president-elect (1935), treasurer, executive secretary, and the attorney for the Association, were present.

#### *Reports of Councilors and Officers*

Each councilor made a report, giving the names of his district officers and the time and place of his district meeting. The councilors also gave information in regard to the counties in their districts which were receiving FERA funds and the counties which were taking part in the immunization campaign. Informal reports of councilors showed medical organization throughout the state generally in excellent condition.

Reports of the officers received.

The councilor of the Third District reported some difficulties in regard to the diphtheria immunization campaign.

In his statement as retiring president Dr. Joseph H. Weinstein gave a general review of the activities of the State Association in regard to the diphtheria immunization campaign, Federal Emergency Relief Act funds and high lights of the past year.

Dr. E. E. Padgett, the incoming president, said that "medical economics is the most important subject we have before us at the present time as a medical organization." He expressed regret that Indiana men were not invited more frequently to speak on scientific matters outside of Indiana.

Dr. W. J. Leach, president-elect (1935), stated that "the American medical profession has become more a part of American society than ever before."

Report of the treasurer showed that the Association had operated with a balance at the end of the year of \$1,269.52 over and above the balance for the previous year.

The editor of THE JOURNAL spoke of the compliments and criticisms received by THE JOURNAL.

#### *Veterans' Hospitalization*

Dr. F. S. Crockett spoke as a member of the Legislative Committee of the American Medical Association upon the subject of veterans' hospitalization.

#### *State Division of Public Health*

Dr. Verne K. Harvey, director, appeared before the Council and spoke of the public health program in Indiana and the desire of the State Division of Public Health to cooperate with the medical profession.

#### *1934 Annual Session*

Preliminary report, along with proposals and suggestions for 1934 annual session at Indianapolis, October 9, 10 and 11, brought before the Council.

#### *Membership Report*

Membership report for 1933 showed 2,709 members as against 2,725 for the same period for the preceding year.

#### *Selection of Alternate Delegate*

As one alternate delegate of the Association could not qualify because of illness, the Council elected Dr. E. M. Shanklin to fill the place as alternate delegate.

#### *National Legislative Affairs*

Correspondence with the United States Employees' Compensation Commission in regard to the cooperation of the medical societies in appointment of physicians to take care of CWA workers who are injured or contract occupational diseases while in the employment of the government brought to the attention of the Council. Other subjects discussed by the Council were the transient indigent establishments, the pure food and drug bill, and malnutrition propaganda.

#### *Miscellaneous Business*

The Council disapproved the contribution of any funds by the State Association, or the Association taking any part in testing the constitutionality of the garnishee law.

The Council also disapproved any undertaking by the Indiana University School of Medicine to place or control in any way the distribution of physicians in rural communities.

#### *Appreciation of the Late Dr. Miles Porter*

The Council expressed the great loss of the Association in the death of Dr. Miles Porter.

#### *Elections for 1934*

Dr. William H. Kennedy and Dr. H. H. Wheeler of Indianapolis were re-elected members of the Executive Committee for 1934. Dr. O. O. Alexander



of Terre Haute was re-elected chairman of the Council.

Respectfully submitted,

O. O. ALEXANDER, M. D.,  
Chairman of the Council.

#### First Councilor District

Every county society in the First District is active. With the exception of one county, practically every doctor in the district, who is eligible, belongs to his county society. It seems to us that whenever problems arise demanding united action, the doctors always meet the need. A moderate amount of adversity strengthens the organization.

The district meeting last spring was highly successful. We appreciated the postgraduate meeting and hope the State Society may see fit to hold many more with us. At the business meeting Dr. I. C. Barclay was elected councilor to succeed the present incumbent. Dr. Barclay has been one of our "old faithfuls" in Vanderburgh County and the First District, and we are proud of him. We predict a very successful administration for him in this office.

JOHN H. HARE, M. D.,  
Councilor.

#### Second Councilor District

The outstanding event of 1934 was the District meeting held at Sullivan, June 6, 1934. The large attendance, with its increased enthusiasm and interest in the professional and social aspects of such a meeting emphasize the value of the district organization.

May I take this opportunity to insist that every county organization insure its proper representation in the House of Delegates?

Local, district and state problems increase in number and importance. Individual members of the medical profession can not help their professional and financial conditions by neglect of their organization.

H. C. WADSWORTH, M. D.,  
Councilor.

#### Third Councilor District

The district reports nothing unusual during the past year. Our component societies have been carrying on in a good fashion despite the depression and the increase in indigent work. Membership is about the same. Good district meetings are held in the spring and fall with an attendance averaging about sixty. I think the next year will show the physicians in this district more interested in medical politics. In this way a great deal of constructive work will be done.

H. C. RAGSDALE, M. D.,  
Councilor.

#### Fourth Councilor District

The Fourth District Medical Society held its annual meeting at Batesville and Osgood, May 24th of this year. The attendance was about normal. The program was very well arranged, starting off with the usual golf tournament at the Batesville

Country Club, and then a trip through the Margaret-Mary Hospital at Batesville was taken. The latter was indeed a treat for the members, for we were given the privilege of seeing probably the most modern, well-equipped, efficient hospital in any small town in the country.

The hospital entertained the doctors as guests at a luncheon at noon. The members then returned to Osgood for the scientific session in the auditorium of the Osgood High School. The papers, presented by members of the Fourth District Society, were excellent and very well received. Following the president's address, these papers were presented:

Recent Advances in Radiology—Dr. W. S. Shuck, Madison.

Arteriosclerosis—Dr. J. F. Treon, Aurora.

Discussion—Dr. John Green, North Vernon.

Angina Pectoris—Dr. W. H. Stemmm, North Vernon.

The program was concluded with two addresses by members of the profession from Indianapolis. Dr. D. H. Row gave us a splendid talk on "Headache and Remote Reflex Symptoms from Ocular Defects;" Dr. Louis H. Segar gave us an address on "Infant Feeding and Malnutrition" which was one of the best talks our members have ever heard. The meeting closed with a banquet at the Methodist Church with Dr. E. E. Padgett, the president of the State Association, as the principal speaker and with a few well-chosen remarks from our executive secretary, Thomas A. Hendricks.

The following officers were elected:

President—Dr. J. C. Elliot, Guilford.

Vice-President—Dr. T. C. Bentle, Greensburg.

Secretary-Treasurer—Dr. E. L. Libbert, Lawrenceburg.

H. P. GRAESSLE, M. D.,  
Councilor.

#### Fifth Councilor District

The county societies of the Fifth District have been functioning normally throughout the past year. There has been little or no numerical change in membership. Nothing has occurred requiring any special activity of the councilor.

The spring meeting was held at Turkey Run State Park in June, and was addressed by Dr. George E. Brown of the Mayo Clinic.

The fall meeting has not as yet been held.

O. O. ALEXANDER, M. D.,  
Councilor.

#### Sixth Councilor District

The Sixth District Medical Society held its annual meeting at Newcastle on Thursday, May 31, 1934, at the Westwood Country Club. The attendance was much larger than usual and a very interesting program was presented.

Resolutions regarding the death of Dr. C. S. Houghland, of Milroy, who had been the secretary of the district society for many years, were unanimously adopted.

Dr. Frank Green, Jr., of Rushville, was elected secretary to complete the unexpired term of Dr. Houghland.

Dr. Samuel Kennedy of Shelbyville was re-elected councilor for a term of three years.

The place of the next meeting is Rushville and the time of the meeting is May 9, 1935.

The various county societies of the district are functioning smoothly and with no friction. Meetings are held regularly by all of them.

In my opinion the district is at the present time better organized than it has ever been.

SAMUEL KENNEDY, M. D.,  
Councilor.

#### Seventh Councilor District

The local medical societies of the district engaged in the usual activities during the past year. Meetings were held according to the former schedules.

The members of the District were entertained at the annual meeting by the Hendricks County Medical Society at Plainfield. An interesting afternoon and evening program was given with discussions of the papers in which many of the members took part. A supper was served in the evening in the gymnasium of the high school by the Domestic Science Department of the Plainfield High School.

The doctors in this district are becoming thoroughly aroused to the economic problems which the profession is facing. A determined wave of resistance is rapidly growing against socialized medicine. If the other Councilor Districts of the state are displaying the same courageous stand against the outside influences that are attempting to break down the traditions of organized medicine as is manifested by the members of the Seventh District, the entire state organization will stand firmly for the American Medical Association and what it represents. Committees are working in the Indianapolis Medical Society formulating a program to oppose any attempt to invade the province of the private physician.

L. A. ENSMINGER, M. D.,  
Councilor.

#### Eighth Councilor District

This District has no grievances, and has had all of its component societies functioning in commendable manner.

An unusually successful meeting was held in Anderson in November, and plans are made for a similar one in Muncie this fall, after our State Association meeting.

Economic conditions have brought about a number of undesirable conditions, but they probably are no different than those in other parts of the state. Although we have participated in FERA funds for medical relief, I am fearful that it has caused a precedent which we may regret in the near future. It is one of the human qualities to resent having to pay for things which have been given gratuitously. We also have something to fear from the younger physicians who, finding economic conditions unfavorable for the establishment of a practice, as in former years, will be forced to foster

state medicine at the expense of our ideas and ideals. When politics enters the medical profession, it ceases to be a profession, and its members become job hunters, ultimately deteriorating to the point of sending out paid solicitors giving commissions to increase their panel or clients. Perhaps the Old Guard can forestall this incipient danger, but nothing less than eternal vigilance for the next few years can prevent the Socialistic Shadow from taking substance and becoming a dire reality. *Unless the ninety-five per cent of the profession which is apparently ignorant of conditions, or indifferent, or asleep, awakens to the facts as they have so rapidly developed, our boat is on the rocks, and even wireless will not save us.*

M. A. AUSTIN, M. D.,  
Councilor.

#### Ninth Councilor District

Affairs in this district proceeded surprisingly well for the past year, considering the bubble-seething times.

Every county society has maintained its organization at "war strength;" new recruits have been added from among the recent graduates; a solidarity of opinion in medical problems is being strenuously fostered.

The oil of diplomacy and the ointment of humanness was applied to an open wound with pleasing and uneventful convalescence.

The district meeting, held at Frankfort, May seventeenth, was an outstanding success. The Clinton County Society supplied a good program and a refreshing entertainment. Much credit is due President A. B. Sims and Secretary I. E. Carlyle for the splendid spirit aroused. The present incumbent councilor was re-elected unanimously to serve through the ensuing years until December 31, 1937.

The invitation of the Tipton County Society was accepted for the meeting in 1935.

FLOYD T. ROMBERGER, M. D.,  
Councilor.

#### Tenth Councilor District

The Tenth District reports nothing of particular interest for the year 1934; our three societies seem to be going along as usual, with little or no trouble having been reported. In Lake County the unsolved problem of indigent medical relief has occupied much attention and continues to be a source of much annoyance to all concerned. During the recent primary there was much of a political flavor attached to the activities of several groups of physicians, each group seeking to nominate their favorite candidate for trustee in the hope of participating in the tidy sum of \$60,000 that has annually been distributed for medical poor relief in North and Calumet townships.

We believe that the profession in the Tenth District is in much better position than a year ago, from an economic standpoint; business has improved and collections are on the up-grade.

E. M. SHANKLIN, M. D.,  
Councilor.



### Eleventh Councilor District

The different societies of the Eleventh District have been functioning above normal; the state well knows our slogan: "The best in the state."

I have but two things to mention, and one is that every society in the district has put over the health program; and the other was our meeting held in Kokomo, May 17, 1934, where we had a good program and elected W. W. Holmes, of Logansport, president.

Our next meeting will be held in Logansport, October 17, 1934, and we are going to ask the Ninth District to meet with us, and in addition, we are going to give every physician in the state an invitation to meet with us as our program will be composed of "Diseases of the nervous system as they are met in every day practice," and the superintendent of the Northern Hospital for the Insane will put on a clinic in the morning, using only cases that are of interest to the general man in medicine. The speakers will be from Indianapolis and Denver, Colorado.

Our district has plenty of "jack" in the treasury and an army of good men, so you see we do things and can do them, and *do* do them. Come and see us.

GEORGE D. MILLER, M. D.,  
Councilor.

### Twelfth Councilor District

All the county medical societies in the Twelfth District did excellent work during the past year. They all were able to use local talent to a great extent and in addition secured good guest speakers at various times.

The four northern counties have a composite society of their own which meets the last Thursday of the month. Unusually good programs were enjoyed this year. Their season ended with a large party at Wolf Lake, Indiana, where Drs. Luckey served the guests with a venison dinner.

E. M. VAN BUSKIRK, M. D.,  
Councilor.

### Thirteenth Councilor District

The affairs of the county societies have gone on in their usual efficient way. The problem that is still paramount is the care of the indigent sick. In some localities this has been done quite satisfactorily to all concerned; in other vicinities the relations between the authorities and the medical profession has not been happy. We believe that if a more uniform set-up could be obtained the trouble in some vicinities would be eliminated. We note that there has been very good cooperation in the county societies of this district.

W. B. CHRISTOPHEL, M. D.,  
Councilor.

### REPORT OF EXECUTIVE COMMITTEE

*House of Delegates and Council, Indiana State Medical Association:*

Gentlemen:

#### I. INTRODUCTION.

The key words of the Indiana State Medical Association for 1934 have been "Aggressive activity," and as a result your committee reports with some pride that your organization has been recognized as being among the leaders of the medical profession in meeting the problems which have arisen and in attempting to do something about them. Notable among the accomplishments of the State Association during the past year are:

1. Indiana was one of the first two or three states to make an agreement with its state relief director to receive funds under FERA for services rendered the indigent sick. The physicians of the state have received some compensation from this source and have rendered splendid services during the emergency.

2. Indiana was one of the first states to register a complaint in Washington in regard to the naming of individual physicians by the government to give medical attention to CWA workers who were injured. It is thought that as a result of this complaint and those from other states, the original orders were revised, and CWA workers were allowed to choose their own physicians. Thus Indiana played its part in averting a step which was in the direction of state medicine.

3. Indiana has carried on an intensive drive against the many forms of group hospitalization and group medical service and thereby has established itself as an ardent foe of the Milbank Foundation and various other highly financed coteries which would further communistic medicine in this country.

4. The "great purge" of the American College of Surgeons, following the advocacy of state medicine by that group and the resulting resolution of the American Medical Association condemning the action of the American College, gained impetus by the immediate action of Indiana physicians who are members of the College.

5. The Indiana State Medical JOURNAL was one of the first to point out the fact that there was danger in the social service "racket" and that many Ph.D's such as C. Rufus Rorem, John A. Kingsbury, the Milbank Foundation and others, were anxious to saddle socialistic and communistic medical schemes upon this country.

6. By cooperating with the State Division of Public Health in the diphtheria immunization campaign the Indiana profession has placed itself among the leaders in the movement to keep preventive medicine and health educational activities in the hands of the medical profession where it rightfully belongs. The aggressive policies of the Association, as carried on through the officers of the Association and the Executive Committee, have

involved the organization in many a battle during the year against these forces which would change the present method of the practice of medicine, irrespective of the damaging effect such change might have on the public and the medical profession. All members may be assured that the Executive Committee will continue this fight to the end.

## II. ADMINISTRATIVE AND EXECUTIVE ACTIVITIES.

1. *Membership.* Indicative of an improved economic situation, of increased interest in local and State Medical Association activities, is the fact that sixty-eight more physicians are members of the Association this year than were members at this same time last year when the annual report was made. The figures are as follows:

Number of members September 1, 1933..2575

Number of members September 1, 1934..2643

2. *National Problems.* Throughout the year the Executive Committee has had a great deal of correspondence with Washington and has attempted to keep in constant touch, both through the American Medical Association and direct with Washington, with developments in order that the Indiana profession could be kept abreast and reliably informed as to developments taking place in the national capital which might have an effect upon the practice of medicine.

(1) *National Recovery Act.* Although many letters, telegrams, and telephone calls were received expressing great fear on the part of the profession, the National Recovery Act affected the physician only indirectly. The National Recovery Act was not formulated to control the activities of professional men.

3. *Group Hospitalization.* Throughout the year the committee gave a great deal of time to the study of this subject and were as far from the belief that a satisfactory plan could be formulated to give hospital care upon some insurance plan to patients in groups at the end of the year as they were at the start. A number of interesting features were developed in the study of the problem.

(1) *Attitude of the Established Insurance Companies toward Group Hospital Insurance.* This was shown in detail in an article that appeared in the August, 1933, JOURNAL entitled, "What Some Big Insurance Companies Think of Group Hospital Insurance." Although this article brought vigorous protests from certain groups interested in furthering group hospital insurance, it was generally accepted as a worthwhile contribution to the rapidly increasing amount of literature that has been written upon this subject during the past year.

(2) *Contact with Harold R. Gordon, Chicago, Executive Secretary of the Health and Accident Underwriters Conference.* Mr. Gordon, who is the executive head of an organization of more than eighty companies writing health and accident insurance, kindly contributed an article to the March, 1934, JOURNAL entitled, "An Insurance Man's View of Group Hospitalization."

(3) Many plans for group hospitalization such as the Greater Boston Hospitalization Plan, the Cleveland Hospital Service Association, and those started in Seattle, and St. Paul, were studied by the committee.

4. *Health Insurance.* The committee gave as much time to the study of health insurance as it did to that of group hospitalization. The attention of the committee was intimately directed toward this problem by the attempted establishment in Indianapolis of the Employees' Medical Service. Had this service been established it would have taken away the right of an individual to choose his own physician and would have violated the Code of Medical Ethics, both in regard to solicitation of business and contract practice. The members of the Executive Committee were present as guests of the council of the Indianapolis Medical Society at a meeting on August 3, 1933, where this matter was discussed by the council. The final decision in the matter of course was the duty and prerogative of the local county medical society.

5. *Study of Other Plans Involving Medical Services to the Under-privileged or to Certain Special Groups.* During the year many plans of one type or another have been brought to the attention or have been studied by the committee whereby the profession is giving or proposes to give medical services to certain groups of persons. Among these plans studied by the committee were services rendered by certain physicians in Michigan under Michigan's Afflicted Child Law, the Detroit prepayment plan for medical services rendered to the employee, the plan of the Friendly Mutual Benefit Association of Indianapolis, Aetna Underwriters Corporation, the Industrial Diagnostic Service of the Chicago Dental Society, a report of which appears in the July number of *Oral Hygiene*, and the Wayne County (Detroit) Medical Society tuberculosis case finding participation plan.

6. *Indigent Sick.* Starting in June, 1933, the Indiana State Medical Association had contacted and had carried on numerous meetings with Mr. Fred Hoke and Mr. William Book, in charge of the state relief work in Indiana. As a result of these meetings Indiana had worked out a plan whereby federal funds could be used to pay for services rendered the indigent sick long before FERA Rules and Regulations No. 7 were promulgated.

Total amount expended in Indiana for medical services (not including hospitalization) by the government under FERA Rules and Regulations No. 7 from July, 1933, to May, 1934, \$331,300. (7.5% of the total federal funds for that period.)

Number of counties participating, 41.

A number of counties have experienced difficulties in working out arrangements to take care of the indigent sick as outlined in FERA Rules and Regulations No. 7. These difficulties often were due to the fact that members of the county societies could not come to an agreement among themselves in regard to this work, some groups in several



counties desiring to continue along the old lines where the trustee named and contracted with individual physicians rather than the whole society. Personalities entered into some of the discussions. In general the system worked out better in the rural counties than in the counties with large cities. No agreement was made with the state relief director to take care of the indigents in Indianapolis under FERA Rules and Regulations No. 7. It was understood by the relief director that these plans were adopted only on a temporary basis. If for any reason they should become permanent much will have to be done to correct the inequities and injustices that apparently exist at the present time in many localities. The medical profession still must give a great deal of service in the office, the home, and the hospital, without compensation.

Letters were received from the following state medical societies, many of them stating that Indiana probably had done more than any other state in perfecting a simple and workable plan with the state relief director: Arizona State Medical Association, Medical Society of the District of Columbia, Louisiana State Medical Society, New Orleans Medical and Surgical Journal, Massachusetts Medical Society, New Hampshire Medical Society, North Dakota State Medical Association, Pennsylvania Medical Journal, State Medical Association of Texas, Medical Society of Virginia, and the West Virginia Medical Journal.

The committee feels it owes a word of sincere appreciation to Fred Hoke, in charge of this work, and to Mr. William Book and his successor, Wayne Coy, for their cooperation and their never-failing courtesy to the members of the committee during the conferences, both formal and informal. Had these officials been so minded it would have made the situation much more difficult.

7. *Transient Indigent Service.* As originally established by the federal authorities and other men sent into Indiana from outside of the state, the relations with the Transient Indigent Bureau were far from satisfactory. However, difficulties and misunderstandings that arose at first (largely due to the autocratic manner of an official of the bureau who contacted the state headquarters office and met with the officers of the State Association and the local county medical society), have been ironed out at the present time. The same policy as was established in dealing with the indigent sick of having local county medical societies work out details with their local officials has been adopted in dealing with the transient indigent service. Wherever there is a transient indigent shelter the officials in charge and the local county medical society are attempting to work out a plan which will be satisfactory both to the transient indigent officials and the medical profession.

8. *New Set-Up of the State Board of Health.* The first actual working year of the State Board of Health since its new set-up has been completed, and the Executive Committee feels that in general this has been most successful. Detailed reports

of the diphtheria immunization campaign, which was the principal activity in which the State Division of Public Health, the county medical societies, the University, and the various health agencies of the state cooperated in putting over, have been carried from time to time in THE JOURNAL, and this campaign will be commented upon in the annual report of the Diphtheria Committee.

In accordance with suggestions and requests from the pathologists of the state during the year, the state laboratory discontinued making tissue diagnoses.

*Report on Venereal Diseases.* Dr. Verne K. Harvey appeared before the committee and made a personal informative presentation of the work that is being done by the Division of Public Health of the state in a campaign against venereal diseases. The committee recommended to the editor of THE JOURNAL that this subject be commented on frequently in THE JOURNAL and that the profession be completely informed as to the part it is to play in the new program. The Executive Committee recommends that each county medical society discuss this matter fully and if there are any questions as to the program, local society officers should get in touch with Dr. Harvey and have the matter completely explained.

The Executive Committee herewith makes several suggestions:

(1) Each county medical society should set aside a meeting each year at which the health officers in that county should make a report to the members of the profession.

(2) As 154 of these health officers are laymen, the Executive Committee has recommended that the Legislative Committee survey the possibility of introducing a bill which makes it obligatory that all health officers be physicians.

(3) At the suggestion of the Executive Committee a full-time medical coordinator for Indiana was appointed to aid the county medical societies and local welfare organizations in carrying out health programs such as the diphtheria immunization campaign. The Executive Committee urges each county medical society to bring these matters to the attention of the coordinator who will lend his help and cooperation in working out a solution for each county medical society.

9. *Codification of the Constitution and By-Laws.* In accordance with the suggestion contained in the annual address of Dr. Joseph H. Weinstein, president, 1933, at the annual session and adopted by the House of Delegates at French Lick, the Executive Committee made arrangements for the codification of the Constitution and By-Laws. The president appointed a codification committee composed of Dr. William N. Wishard, Sr., Dr. Weinstein, Dr. Alexander Cavins, statistician, Albert Stump, attorney for the Association, and Thomas A. Hendricks, executive secretary. The Executive Committee herewith wishes to compliment the committee on its conscientious work and its very effective results. For a complete report of this committee,

see the September, 1934, number of *THE JOURNAL*. All physicians are asked to study this question thoroughly during the next year as it will all come up for vote in the House of Delegates in 1935.

10. *Free Beds in University Hospitals.* Dr. Weinstein in his annual address at French Lick last year made the following statement concerning the University hospitals:

"I take the liberty of quoting again one of our ex-presidents, Dr. Crockett, who said in his presidential address, 'Conduct of the medical school and hospitals should be such as to keep the state free from competition with the private practitioner. Considerable irritation has been voiced by certain of our members in the past over regulations which permitted the state, through state owned and operated hospitals, what seemed to be competition with the doctor in private practice. As long as such incidents occur, closer cooperation between the medical school and the State Association will be increasingly difficult. Teaching material only should be admitted to the medical school hospitals. Admission of pay patients places the state in competition with the private practitioners and community hospitals.'"

In accordance with this suggestion, Dr. F. S. Crockett and Dr. F. H. Jett have been working upon this subject and will have a report to offer at some future date. The Public Relations Committee made a complete study of the situation and in its annual report last year informed the profession that the pay beds could not be removed from the hospitals by any legislative act due to the fact that special provision had been made for them in the will by which the University hospitals were bequeathed to the state. For further report upon this subject, see the present report of the Public Relations Committee.

#### 11. *County Organization.*

(1) Despite the trying times the Executive Committee feels from all the reports received from county organizations that the Indiana State Medical Association perhaps is better unified and is functioning better than ever before. The committee wishes particularly to call to the attention of the profession of the state and to congratulate the Knox County Medical Society upon its reorganization and upon the fact that once again it is taking its place as one of the most effective and active societies in the state.

(2) Officers of several county societies have written the headquarters office that they are not fully familiar as to what ones of their membership are eligible to honorary membership in the State Association. The Executive Committee herewith repeats the action taken by the House of Delegates in creating honorary memberships in the State Association:

"WHEREAS, Honorary Membership in the Indiana State Medical Association does not include physicians of the State of Indiana who have at-

tained the age of seventy-five years, and have held membership in the Indiana State Medical Association for twenty years or more,

"BE IT RESOLVED, That the House of Delegates create this classification, which will require no State or National dues, and payment for State *JOURNAL* to be made by the County Medical Society so proposing such name to the State Association for vote and inclusion in such classification."

(In the codification of the Constitution and By-Laws it is suggested that some minor changes be made in this resolution.)

(3) *Membership Roster.* For the first time since the publication of *THE JOURNAL* an annual roster of the membership will be printed this year in the December issue of *THE JOURNAL*. According to the plans of the committee, the roster will be printed each year hereafter in the December *JOURNAL*.

12. *Itinerant Quacks.* A number of itinerant quacks, who generally are food faddists, giving a series of "free health lectures," bombarded the state last year. The Executive Committee wishes to thank the State Board of Medical Registration and Examination for its attempts to get these men out of Indiana. Suggestion has been made that legislation be drawn up which will prevent these men from coming into Indiana and giving these talks.

13. *Possibility of Holding 1936 Meeting of American Medical Association in Indianapolis.* The ground work has been laid by the delegates of the Indiana State Medical Association to invite the American Medical Association meeting to Indianapolis in 1936. Whether this plan is carried out depends upon the determination of the officials of the American Medical Association as to whether or not Indianapolis has the proper facilities to take care of the meeting.

14. *Exchange of Delegates to Meetings of Neighboring State Societies.* At the suggestion of Harold M. Camp, M. D., secretary of the Illinois State Medical Society, that representatives of Wisconsin, Iowa, Missouri, Indiana and Illinois be sent to the state convention of other state societies, Dr. F. S. Crockett who was to attend the Illinois meeting upon business concerning the American Medical Association, was designated to serve as delegate from Indiana and present greetings and best wishes from Indiana to Illinois. An invitation has been issued to the Illinois Society to send visiting delegates to the Indiana State meeting.

15. *Recognition of Indiana Men on A. M. A. Committees.* The Executive Committee instructed the statistician to make a survey in regard to the number of men from different states who have been on standing committees of the A. M. A. and have served as officers of that organization during the last ten years. No Indiana men were upon any standing committee of the American Medical Association at that time. Since the report was made Indiana delegates to the American Medical Asso-



ciation meeting at Cleveland were placed upon several of the reference committees of the House, and Dr. F. S. Crockett and Dr. R. L. Sensenich are serving on a special legislative committee of the American Medical Association. Dr. John Carmack was elected secretary of the Section on Laryngology, Otology and Rhinology at the Cleveland meeting.

16. *Medical Service to CWA Workers.* The officers of the State Association immediately protested to their legislators in Washington and directly to the White House when word was received that individual physicians would be named by the government to take care of CWA patients. As a result of the protests from this and other states the original government rulings were changed so that CWA workers might have the choice of their own physician.

17. *Action of Executive Committee in Regard to Complaint Against State Tuberculosis Sanatorium Practicing Medicine.* A letter was received from the Vigo County Medical Society complaining that various state tuberculosis sanatoria were making x-ray plates of the chest of any individual requesting that these be made, regardless of his financial standing. The sanatoria were charging from \$1.00 to \$2.00 for these plates and the plates were made regardless of the individual's ability to pay and without consulting the individual's family physician. The only definite complaint was made by the Vigo County Medical Society against the State Sanatorium at Rockville. The Executive Committee immediately got in touch with J. V. Pace, M. D., superintendent of the Rockville Sanatorium, to ascertain the facts. Through Dr. Pace satisfactory arrangements were made, whereby hereafter the sanatorium will make x-ray plates only for those who are certified to the institution as being indigent by the township trustee.

18. *Standardization of Indiana Hospitals.* Suggestion has been made that the Indiana State Medical Association should standardize the hospitals in this state rather than have this done by the American College of Surgeons. This matter was taken up with the American Medical Association and the correspondence in regard to it was forwarded to the chairman of the state Committee on Medical Education and Hospitals. That committee has not yet reported its action to the Executive Committee.

19. *Proposed Establishment of State Clinics for Mental Hygiene Cases.* Dr. Max Bahr, superintendent of the Central State Hospital of Indianapolis, appeared before the committee and outlined the establishment of diagnostic clinics for mental cases by state hospitals. The Executive Committee assigned this entire subject to the state Committee on Mental Health whose report appears in the following pages.

20. *Request of Nurses for Shorter Work Day.* The Executive Committee felt that this matter should be referred to the Council of the Association as it is a matter involving questions which should

be studied by that group and, if thought advisable, it should be brought before the House of Delegates.

21. *Possible Locations for Physicians.* For the past six years the headquarters office has maintained an up-to-date list of possible locations for physicians. During the past year the services rendered to young physicians starting to practice in Indiana have been much appreciated. The committee hopes that the profession in general will co-operate in this effort by sending in information as to any localities where physicians may be needed. The Executive Committee notes that 143 physicians took the State Board Examination in June and that the rate of graduation in Indiana alone is above the death rate and that, generally speaking, this state is well supplied with physicians at the present time.

### III. THE JOURNAL.

The business management of THE JOURNAL since January 1, 1933, has fallen directly upon the Executive Committee, acting as an agent for the Council.

The total number of pages in THE JOURNAL through September 1934 follow:

Reading pages .....	424
Advertising pages .....	300

There will be at least 600 reading pages by the end of the year.

Many questions concerning the acceptability of various types of advertising have been settled by your committee. Upon the recommendation of the American Medical Association the committee voted to accept properly censored cigarette advertisements but it voted not to accept any beer or liquor advertisements of any sort.

During the year a request was made by the William B. Burford Printing Company asking that an increase in the price of printing THE JOURNAL be allowed as there had been an advance above anything expected in the price of paper and the cost of labor because of the NRA program. The committee disapproved any increase in price over that provided in the contract and the present contract has been renewed at the same price for 1935.

The statement of the Executive Committee in regard to the business management of THE JOURNAL has been made brief purposely as the editor of THE JOURNAL has an extended report on that publication.

### IV. MEDICAL DEFENSE ACTIVITIES.

1. Following is a report on the defense fund account as of September 1, 1933:

The By-Laws require that 75c out of the annual dues of each member shall be set aside as a special fund for medical defense. Prior to 1928 the By-Laws contained the provision that whenever the medical defense fund exceeded the sum of \$6,000, the surplus above that amount should be turned back into the general treasury or used as the House of Delegates or Council directed. The ac-

cumulations of the medical defense fund under that provision went into the general treasury and are now reflected in the total of \$35,317.81 shown in the surplus account. The general funds as shown in the September, 1933, JOURNAL have been invested from time to time as they accumulate in various bonds. Six thousand dollars (\$6,000) of such bonds are kept separate to support the medical defense fund.

The following is a statement of the income, the expense and the balance in the medical defense fund from January 1, 1928, to September 1, 1933:

	Income	Mems.	Expense	Balance
1928 .....	\$2,053.50	( 2,738)	\$1,650.00	\$403.50
1929 .....	2,050.50	( 2,734)	965.25	1,085.25
1930 .....	2,054.25	( 2,739)	52.25	2,002.00
1931 .....	2,075.25	( 2,767)	1,066.40	1,008.85
1932 .....	2,040.00	( 2,720)	1,715.00	325.00
1933 (to Sept. 1).	1,931.25	( 2,575)	1,489.25	442.00
Total ...	\$12,204.75	(16,273)	\$6,938.15	\$5,266.60

From this balance the following bonds were purchased at the following prices:

1 \$1,000 City Hospital Bond.....	\$1,094.84
2 \$1,000 Marion County Flood Prevention Bonds .....	2,033.86
2 \$1,000 School City of Ft. Wayne Bonds .....	2,016.60
	\$5,145.30
Balance in medical defense fund.....	\$5,266.60
Total cost of bonds.....	5,145.30

Balance in cash in med. def. fund....\$ 121.30

A check against the general funds for this balance has been drawn and will be deposited in an account to be known as the Indiana State Medical Association Defense Fund in the Indiana National Bank.

Bond account of the medical defense fund:

5—\$1,000 Liberty Bonds .....	\$ 5,000.00
1—\$1,000 Marion County City Hospital Bond .....	1,000.00
2—\$1,000 Marion County Flood Prev. Bonds .....	2,000.00
2—\$1,000 School City of Ft. Wayne Bonds .....	2,000.00
	\$10,000.00

These bonds are segregated in a separate department in the safety deposit box. At the time the audit was made of the books of the Association on August 9, 1933, by Mr. R. E. Welch, whose report was published in the September, 1933, JOURNAL, the bonds were not segregated in the manner here shown except the \$6,000 worth of bonds as shown in that report. An account had been kept of the accumulations in the medical defense fund as above set forth. The deposit in the bank was carried as a general deposit of the State Association. The medical defense funds which had accumulated as

shown in the above statement had been invested, along with any other funds available, in bonds from time to time. The treasurer's attention was called to the fact that the medical defense fund is required under the By-Laws to be kept separately. Thereupon an allocation of the bonds carried in the general bond account of the Association was made and the bonds as above set forth in the medical defense bond account were segregated from other bonds and kept separately therefrom. These bonds were selected in order to equal as nearly as possible in the total amount spent for them the total amount of accumulations in the medical defense fund and the books were made to show the amount in the medical defense fund accumulated from 1928 as shown above, totaling \$5,266.60, and book entries were made showing the payment to the general fund from the medical defense fund of the amounts shown above for the purchase of the bonds. This left a balance in the medical defense fund of \$121.30.

The opinion of our attorney was secured as to whether or not the investment in bonds kept segregated from the general assets of the Association was properly regarded as keeping the defense fund separately, and he stated that in his opinion it was. His written opinion covering that point follows:

"I have at your request investigated the provisions of the By-Laws of the Association in regard to the medical defense fund and particularly the question as to whether or not the investment of the money belonging to the defense fund in bonds, which are kept and ear-marked as bonds belonging to the defense fund, is in accordance with the requirements of the By-Laws.

"In my judgment the funds may be invested as trust funds usually are in any form of investment which is available under the laws of the State of Indiana for such investment. The investment of the medical defense funds in the bonds as shown in the Treasurer's report in my judgment conforms to the requirements of the By-Laws and was a proper investment."

2. Statement on Medical Defense Fund from September 1, 1933, to September 1, 1934:

#### Deposits:

Nov. 6, 1933.....	\$ 121.30
Dues, 137 — 1933 members @ 75c .....	102.75
Dues, 2627 — 1934 members @ 75c (to Sept. 1, 1934) ..	1,970.25
	\$2,194.30

#### Disbursements:

Malpractice fees .....	\$ 550.00
Salary of Association attorney .....	400.00
Treasurer's bond .....	15.00
Printing of checks .....	11.25
Govt. tax .....	.20
	976.45

Balance, September 1, 1934.....\$1,217.85



3. For the first time in several years the number of malpractice cases threatened or actually filed against physicians decreased during the past twelve months. We believe to a great extent this has been due to the fact that the public generally is beginning to realize that it is very difficult to get a judgment against a doctor and hence purely blackmail and hijacking suits have fallen off somewhat. The committee also believes that this is due to a greater cooperation between the individual physician and the Indiana State Medical Association. Physicians have come to know that whenever a suit is threatened the headquarters office should be notified at once. Through the attorney of the Association many of these suits have been stopped before they have come to trial.

A year ago, at the time of this report, August 1, 1933, the following seventeen cases were pending before the committee, four of which have been closed, and the committee reports the following progress on these seventeen cases:

Case No. 129—Case pending. No new developments.

Case No. 151—Suit filed July, 1927. Pending.

Case No. 156—Suit filed March 27, 1928. Case pending. Verdict for plaintiff after six days' trial in 1933; case to be appealed. Expense, \$66.28, paid September 23, 1929; \$350.00, paid June 30, 1933.

Case No. 162—Case still pending. Tried in 1928 and postponed. No further developments.

Case No. 170—Suit filed June 2, 1930. Pending.

Case No. 172—Suit filed April 9, 1930. Pending.

Case No. 175—Suit filed December, 1930. Tried May, 1933; verdict for all defendants. Expense, \$200.00, paid June 30, 1933. Motion for new trial, July 24, 1933, overruled. Expense, \$50.00, paid July 20, 1934.

Case No. 176—Suit filed March 28, 1931. Still pending.

Case No. 181—Suit filed September 8, 1931. Pending.

Case No. 184—Suit filed October 13, 1931. Pending.

Case No. 187—Suit filed February 13, 1932. Three days' trial; jury disagreed; new trial ordered. Expense, \$250.00, paid on February 20, 1934.

Case No. 188—Suit filed July 2, 1927. Case tried; verdict for plaintiff. Motion filed for new trial. Expense, \$300.00, paid on June 22, 1932. Defendant died November 15, 1932, closing case. Expense \$150.00, paid on Feb. 30, 1934.

Case No. 192—Suit filed August 9, 1932. Defendant died Dec. 19, 1933. Case dismissed shortly prior to his death. Expense, \$50.00, paid Feb. 20, 1934.

Case No. 194—Suit filed July 9, 1932. Pending.

Case No. 195—Suit filed October, 1932. Four days' trial; verdict for plaintiff in amount of \$500.00. Expense, \$300.00, paid April 7, 1933. Motion for new trial May 5, 1933, overruled. Expense, \$50.00, paid July 20, 1934.

Case No. 197—Suit filed December 30, 1932. Pending.

Case No. 198—Suit filed May, 1933. Pending.

Since August 1, 1933, and up to September 1, 1934, the following three new cases have come before the committee, leaving a total of sixteen cases pending at the present time, as against thirteen unclosed cases at the same time last year:

Case No. 199—Suit filed August 1, 1933. Pending.

Case No. 200—Suit filed February 12, 1932. Not brought to the attention of the Executive Committee until September, 1933. Action pending.

Case No. 201—Suit filed originally Dec. 11, 1933, and refiled June 11, 1934. Action pending.

The total cost for medical defense from August 1, 1933, to September 1, 1934, was \$550.00. The preceding year the expense was \$1825.00 and the year before that it was \$1980.65.

#### V. CONCLUSION.

In addition to these many major problems your Executive Committee in its regular monthly meetings has acted upon many minor problems, included among them, disputes in regard to membership, actions of county medical societies against physicians for one cause or another, and it has reviewed protests, resolutions and motions referred to it by local county medical societies or other state organizations, and further it has done many odd jobs, each one perhaps of minor importance but in the aggregate greatly important.

Thus your committee, in making its final report at the end of what has been perhaps the most strenuous year in the history of the Indiana State Medical Association, is of the opinion that continued watchfulness on the part of the profession can maintain the high standard of medical service which has become an established American tradition.

Respectfully submitted,

W. H. KENNEDY, M. D., Chairman.

H. H. WHEELER, M. D.

E. E. PADGETT, M. D.

W. J. LEACH, M. D.

O. O. ALEXANDER, M. D.

#### REPORT OF COMMITTEE ON LEGISLATION AND PUBLIC POLICY

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

#### I. FOREWORD.

Seldom have duties of a committee charged with legislative responsibilities been heavier in an off-

legislative year than the present. This, of course, is due to the enormous amount of new legislation and new governmental activities that have been undertaken at Washington, much of which affects every physician as a citizen, and some of which definitely affects every physician professionally. In addition, we have problems within our own state and we must maintain our own position in order that we may be prepared to uphold the standards of medicine and safeguard the public health against any activities that may be undertaken to socialize medicine or let down the bars to the cults at the coming session of the state legislature.

Much of what has gone on in Washington of immediate interest to the medical profession and what may go on when the state legislature meets next January has been discussed in *THE JOURNAL* so without going extensively into detail on these subjects at this time, your committee will recall briefly the major points of interest.

## II. NATIONAL IN SCOPE.

1. *NRA*. Despite much apprehension that it would be subjected to a governmental code, the medical profession, along with many other professions, did not come under the *NRA*. Several attempts were made, we understand from certain sources, to bring the profession under a code, but each plan was pigeon-holed. General Johnson stated that the professional man was exempt.

2. *FERA*. Indiana was one of the first states to work out with the state relief administrator a plan whereby federal funds might be used to pay physicians for services rendered the indigent sick. Immediately subsequent to the completion of this plan the *FERA* issued its now famous pamphlet No. 7 under which arrangements were made by the various local county medical societies to carry on this work. (Details of this have been carried on by the officers of the Association under the direct supervision of the Executive Committee which gives a detailed review of this in its annual report to the House of Delegates.)

3. *CWA*. When the *CWA* went into effect the men employed came under the United States Compensation Commission Act of 1916 and as such would receive compensation for any injuries contracted while in government employment. To take care of those injured the government at Washington specified certain physicians. Immediately a protest against this practice was sent to the President and an order was issued allowing each injured man to choose his own physician. Indiana received credit in the *American Medical Association Journal* for its prompt action in this regard.

4. *Veterans' Legislation*. When the matter of restoration of veterans' compensation, along with the old features which brought about the abuses in hospitalization against which the profession has so often and so vigorously protested, came before Congress, your committee sent the following telegram to each of the Indiana delegates in Washington:

"SPEAKING FOR THREE THOUSAND MEMBERS OF THE INDIANA STATE MEDICAL ASSOCIATION YOU ARE URGED TO REJECT SENATE AMENDMENT TO H R SIXTY SIX SIXTY THREE WHICH WOULD RESULT IN THE RETURN OF OLD ABUSES IN HOSPITALIZATION OF VETERANS STOP INDIANA PROFESSION IS FOR LIBERAL HOSPITALIZATION BENEFITS FOR SERVICE CONNECTED ILLS BUT IS STRICTLY OPPOSED TO IN-DISCRIMINATE FREE HOSPITALIZATION FOR EX-SOLDIERS WITH NON-SERVICE CONNECTED DISABILITIES WHO ARE ABLE TO PAY STOP FREE HOSPITALIZATION UNDER SENATE AMENDMENT WOULD BE UNJUST UNECONOMICAL AND A BASIS FOR SOCIALISTIC MEDICINE."

5. *Pure Food and Drug Legislation*. A thorough study of this legislation has been made by the committee and the committee is ready to act in accord with the suggestion of the Bureau of Legal Medicine and Legislation of the American Medical Association when and if such suggestion is made, should such legislation be re-introduced at the next session of Congress. After corresponding with the Bureau of the American Medical Association in regard to this, the committee determined that it had better wait until it received such suggestion before acting. In general the committee strongly favored the intent of this legislation but did not feel that the method of execution was what it should be.

6. *Sickness Insurance*. Frankly, your committee is most apprehensive of what future developments may be. Suffice it to say here that it is alive to all the dangers and threats of the situation and is prepared to act with decision and dispatch when the time comes for such action.

## III. STATE OR LOCAL IN SCOPE.

Many of these problems that heretofore have been national undoubtedly will become intensified when further localized by action of the Legislature next January. That will necessitate intensive study and action by your committee. In addition the cultists and other groups will attempt to throw down the bars and lower standards in order that their hordes of practitioners may gain an entrance into Indiana without proper qualifications.

## IV. IN CONCLUSION.

Therefore your state committee urges that each county society have an active, functioning committee which will contact the candidates for Congress and the State Legislature, have a formal conference with each of them, present the viewpoint of the medical profession to them and urge them to keep an open mind upon these questions and not obligate themselves to support any legislation concerning the public health and practice of medicine without listening to the viewpoint of the medical organization in their own county.

In closing the committee wishes to thank the many hundreds of physicians throughout the state for their prompt help and cooperation whenever they have been called upon, and to express ap-



preciation to each of the local legislative committees which have rendered such efficient and sterling service.

Respectfully submitted,  
O. T. SCAMAHORN, M. D., Chairman.  
GEORGE DANIELS, M. D.  
F. H. JETT, M. D.  
L. E. FRITSCH, M. D.  
JOHN A. ASPY, M. D.  
JOHN C. GLACKMAN, M. D.

#### REPORT OF THE EDITOR OF THE JOURNAL

As we said in our report of a year ago, we are quite willing to let THE JOURNAL speak for itself; it has come to you each month and on time; our aim has been to bring to you what might be termed a cross section of Indiana Medicine. The fact that we have received little criticism from our membership would seem to indicate that Indiana physicians have been at least satisfied with our efforts.

Judging from the experiences reported in other states, as well as in Indiana, state medical journals, as a group, have had rather tough sledding, many of them showing a deficit, due to curtailment of advertising programs. In that regard we have been most fortunate, since THE JOURNAL is showing a profit. A year ago we stated that one of the smartest things the Council had done, in connection with THE JOURNAL, was to name an editorial board; we wish to reiterate that opinion. We have found Board members ready at all times to cooperate with us; they have been generous in the material sent in for publication; in matters of editorial policy we have been always unanimous. Nor should we overlook the fact that we have two strong allies at headquarters, Mr. Hendricks and Miss Toman; much of our success is due to their efforts.

We believe we may say, in all modesty, that *The Journal of the Indiana State Medical Association* compares most favorably with the official organ of any state in the Union. We thank the membership for their many contributions and for their numerous letters of commendation.

E. M. SHANKLIN, M. D., Editor.

#### REPORT OF THE BUREAU OF PUBLICITY

*House of Delegates, Indiana State Medical Association:*  
Gentlemen:

##### I. HISTORICAL BACKGROUND OF BUREAU.

The Bureau of Publicity was created by a motion made at the second meeting of the House of Delegates at Muncie, September 29, 1922, providing for "the chair to appoint a committee of three to arrange for the selection of an educational secretary whose duties and salary shall be defined by the Council."

*Personnel of Committee on Public Education:*  
W. N. Wishard, Chairman, David Ross, Frank W. Gregor.

\$5,000 appropriated for work.

At the midwinter meeting of the Council January 19, 1923, a report was received recommending that a "Bureau of Information" be established. At this meeting of the Council nothing was said concerning the scope and the function of the Bureau, hence the scope, duties and function of the Bureau were left largely up to the Bureau itself. Dr. Wishard presented a budget of estimated expenses for the first year and recommended the appointment of Dr. J. N. Hurty as secretary. It was moved and carried that the plan be put into effect after April 1, as Dr. Hurty would not be available until that time. Doctors Earp, Shanklin and Bulson named advisory committee to Bureau.

*First meeting, House of Delegates, Terre Haute, September 26, 1923:* Dr. Wishard made a report and asked for \$2,000 additional although the \$5,000 had not been spent. Carried. He also reported that Dr. Hurty's illness had prevented opening of the office.

*Midwinter meeting of Council, Indianapolis, December 28, 1923:* Bureau of Publicity presented full report, giving an outline of work, and stating that Dr. James H. Stygall had been selected as secretary, with the approval of the Council. Report accepted.

The same members of the committee were re-appointed for the year 1924 by President Earp.

*Second meeting, House of Delegates, Indianapolis, September 26, 1924:* Bureau recommended that members of the new bureau be appointed, one for one year, one for two years, and one for three years, and thereafter each member be appointed for a term of three years.

Bureau recommended an increase of \$1,000, making total budget for the year 1925, \$8,000. The anticipated expense of the Bureau at the beginning of its work contemplated establishment of an Indiana State Medical Association office and payment of salaries of an all-time secretary and stenographers and other office expenses. This expense was transferred years ago to the Executive Committee which meets the maintenances of the State Association offices, including salaries, etc. The expenses of the Bureau of Publicity never have exceeded \$500 and this year's budget is for \$425.

Council further recommended that the Bureau of Publicity with the cooperation and approval of advisory committee of the Council be empowered to employ such help as may be required and for such length of time as seems advisable.

*Called meeting of the Council, November 28, 1924:* Resignation of Dr. Stygall presented and accepted. Appointment of Thomas A. Hendricks, executive secretary for the Association, approved.

As time has passed the Bureau has sought information, discussed and given opinions upon a great many matters, in addition to performing its routine function of preparing and distributing newspaper articles and supplying speakers upon request to

lay organizations and to medical societies. As the Bureau meets every week it has become the custom of the executive secretary to refer many matters to the Bureau which require immediate answer. In making its formal annual report to the House of Delegates and its informal report at the annual midwinter meeting of the Council, the Bureau always has given a detailed outline of its additional as well as its routine activities. In every instance these reports of the Bureau have been accepted.

*Purpose of the Bureau.* From time to time the purpose and general scope and function of the Bureau have been stated for the profession. Several of these statements follow:

*Report to House of Delegates, September, 1926:* "The purpose of the Bureau is to give the public in interesting, popular fashion, scrupulously accurate information in regard to scientific medicine in its various relations to human needs."

*Report to House of Delegates, September, 1927:* "An important new field of the work of the Bureau developed in warning the public and the profession against an extensive campaign by food faddists. . . .

"It is gratifying to report that the Better Business Bureau has referred questions of medical frauds to the Bureau of Publicity and the Bureau, whenever possible, has given cordial cooperation in exposing and preventing fraudulent activities among pretenders and quacks. . . .

"*The Professional Relations Committee of the West Virginia State Medical Association is undertaking work in that state along the same general lines as the Indiana Bureau.*" (In the absence of a professional relations committee in Indiana the Bureau of Publicity has functioned as such a committee in this state.)

By a resolution passed by the House of Delegates in 1927 the Bureau of Publicity was instructed "to act as a special committee to confer with similar committees appointed by voluntary health agencies on matters pertaining to the work of these public health organizations and their relation to the medical profession."

"The Bureau of Publicity during the year received appeals from persons who were defrauded by cancer quacks and charlatans." The Bureau investigated each of these cases thoroughly, in cooperation with the Bureau of Investigation of the American Medical Association and the Better Business Bureau of Indianapolis.

*Report to House of Delegates, September, 1929:* "Many institutions, organizations and individuals throughout the state wrote or took up in person with the Bureau of Publicity matters of one nature or another during the year. Some of the requests which the Bureau felt were against the best interests of public health were openly opposed by the Bureau. In several instances the Bureau withheld its approval but took no action or opposition. Still other movements received the wholehearted support of the Bureau. . . .

"Many questions were brought before the Bureau during the past year as to what constitutes unethical advertising. . . .

"As in the past the Bureau of Publicity has been active in cooperating with the various authorities of the state to suppress medical frauds in one form or another. . . .

"Carrying on its work in accordance with the instructions received from the House of Delegates two years ago your Bureau has acted as a special committee to confer with various organizations on matters pertaining to activities of these organizations and their relation to the medical profession."

*Introductory Summary.* A brief summary of the scope of the work done by the Bureau follows:

- (1) Preparation and distribution of medical articles.
- (2) Supplying speakers for lay and medical meetings.
- (3) Cooperation with health and welfare agencies and organizations.
- (4) Cooperation with the Indiana High School Athletic Association.
- (5) Suppression of medical frauds and food faddists.
- (6) Cooperation with Better Business Bureau.
- (7) Cooperation with State Dental Society.
- (8) Promotion of periodic health examination work.
- (9) Re-establishment of scientific exhibit at annual meeting of State Association.
- (10) Cooperation with the Committee on the Cost of Medical Care.
- (11) Receives many requests and gives opinions concerning questions in medical ethics.
- (12) Cooperates with State Board of Medical Registration and Examination.

Finally, the services of the Bureau have been available to the lay press, the public and the profession on all occasions, and the Bureau has felt that its search for information and the expression of its opinions in answer to any requests were within the scope of its work.

#### *Members of the Bureau:*

- 1924: Wm. N. Wishard, Frank W. Cregor, David Ross.  
 1925: Wm. N. Wishard, S. E. Earp, Wm. A. Doeppers.  
 1926: Wm. N. Wishard, S. E. Earp, Murray N. Hadley.  
 1927: Wm. N. Wishard, Murray N. Hadley, J. A. McDonald.  
 1928: Wm. N. Wishard, Murray N. Hadley, J. A. MacDonald.  
 1929: Wm. N. Wishard, C. P. Emerson, J. A. MacDonald.  
 1930: Wm. N. Wishard, C. P. Emerson, J. H. Stygall.  
 1931: Wm. N. Wishard, C. P. Emerson, J. H. Stygall.  
 1932: Wm. N. Wishard, J. H. Stygall, E. D. Clark.  
 1933: Wm. N. Wishard, J. H. Stygall, E. D. Clark.  
 1934: Wm. N. Wishard, J. H. Stygall, E. D. Clark.

## II. HISTORICAL WORK OF THE BUREAU.

(1) Under the direction of the Bureau, Dr. L. G. Zerfas, historian of the Association, gathered together pictures and biographical sketches of the past presidents of the Association. These photographs will be the permanent possession of the headquarters office. They will be first presented in



the scientific exhibit at the state meeting in October. This took a great deal of time and effort, and the Bureau wishes to congratulate the historian and his assistant, Miss Woodbridge, upon the efficient manner in which they undertook and carried to a conclusion this difficult job.

(2) *Historical Articles in THE JOURNAL.* Starting with January, 1935, the historian of the Association will have short articles of historical value in *THE JOURNAL* from time to time. These articles may not appear every month but at least they will appear every other month. Any information of historical interest should be sent either directly to the historian or to the Bureau of Publicity.

(3) Interest in the history of medicine in Indiana has been on the increase and during the past year a number of county societies have, on their own initiative or at the suggestion of the Bureau, appointed a special committee of the county to compile historical data of local medical interest and to prepare a pamphlet on that subject. Several articles on medical history have appeared in *THE JOURNAL* written by authors other than the state historian, the merit of which the Bureau wishes to commend. Several of the district societies have taken an interest in this, the Publicity Bureau desiring especially to congratulate the Third District Medical Society upon the very interesting program of the spring meeting, a part of which was devoted to subjects which had to do with local medical history.

### III. RADIO BROADCASTING RULES.

Time and again the Bureau of Publicity has commented upon and set forth the rules of the Indiana State Medical Association in regard to the use of speakers' names in radio broadcasts. The rule, adopted several years ago by the Publicity Bureau in regard to this, which on several occasions has been approved by the House of Delegates, follows:

The Bureau has adopted a rule that no physician who is in private practice should have his name mentioned over the radio in connection with the Bureau of Publicity broadcasts. The names of physicians holding public office and connected with public institutions may be mentioned over the radio.

The president of the Association, in his annual address last year, made the following comment in regard to the use of speakers' names in radio broadcasts:

"My attention has been attracted by the number of physicians' names published in newspapers as having talked to civic clubs and lay organizations. Also in radio talks the speaker's name is too frequently mentioned. Even though the talks are sponsored by the local medical society, the Bureau of Publicity ruled in 1929 as follows: The Bureau has adopted a rule that no physician who is in private practice should have his name mentioned in connection with any publicity. The practice of having individual names mentioned in such efforts completely disrupted the Bureau in

California several years ago, and was the cause of bitter argument and a split in the St. Louis Society; therefore, the advisability of following the Bureau's rule is heartily endorsed by your officers, and I earnestly request its closer observance in the future."

During the year a request was made by one of the local county societies that the Bureau make an exception to this rule in regard to broadcasting in this local county. The Bureau, after much correspondence and discussion, felt that no exception to this rule should be made.

In addition to the correspondence with the radio committee of one county medical society, a letter was received from the business manager of a hospital in this state which read as follows:

"For the past several months we have been broadcasting direct from the Hospital Solarium, a health educational talk each week. The various members of our medical and surgical staff have assisted us in presenting various medical topics. We have found this to be very educational and are confident that scientific subjects should be presented by scientific men rather than for the public to receive it from quackery, patent medicine, fakes and other types of magic.

"I assume the roll of announcer and present, in a very dignified and ethical way, the speaker something as follows:

"Each Thursday afternoon at 3:30 p. m. the .....Hospital presents a health educational program. We are pleased to present to you Dr. ...., who will speak to you on ....."

"We do not mention anything about the doctor, where his office is located, or any other point. It simply gives his paper scientific weight and also enables us to select men who are capable in the particular subject.

"I am very anxious to know if the Indiana Medical Association is opposed to any such plan." The Bureau answered that letter as follows:

"At the last regular meeting of the Bureau your letter was presented, along with the Michigan booklet. The Bureau of Publicity has instructed me to state that it has gone over your letter carefully and that the Bureau has no objection whatsoever to the broadcasting but that the rule of the Bureau of Publicity forbids the use of the name of any physician in private practice over the radio. The Bureau feels that this broadcasting would be perfectly proper were it given under the approval of the.....Hospital, but it feels that any physician will find himself in a delicate position if his name is used.

"The broadcasting rules laid down by the Bureau of Publicity several years ago follow:

"The Bureau has adopted a rule that no physician who is in private practice should have his name mentioned over the radio in connection with the Bureau of Publicity broadcasts. The names of physicians holding public office and connected

with public institutions may be mentioned over the radio.'"

#### IV. PRINCIPLES OF MEDICAL ETHICS.

In making its rule concerning the use of names of physicians in private practice on the radio, the Bureau was guided by the Principles of Medical Ethics of the American Medical Association. It has specific reference to the following paragraphs in the Principles of Medical Ethics, to which it wishes to call the attention of the general profession once again:

"It is equally unprofessional to procure patients by indirection through solicitors or agents of any kind, or by indirect advertisement, or by furnishing or inspiring newspaper or magazine comments concerning cases in which the physician has been or is concerned. All other like self-laudations defy the traditions and lower the tone of any profession and so are intolerable. The most worthy and effective advertisement possible, even for a young physician, and especially with his brother physicians, is the establishment of a well-merited reputation for professional ability and fidelity. This cannot be forced, but must be the outcome of character and conduct. . . .

"It is unprofessional to promise radical cures; to boast of cures and secret methods of treatment or remedies; to exhibit certificates of skill or of success in the treatment of diseases; or to employ any methods to gain the attention of the public for the purpose of obtaining patients."

#### V. BUREAU REPRESENTED AT THIRTEENTH ANNUAL CONGRESS ON MEDICAL EDUCATION, LICENSURE AND HOSPITALS.

As is customary, a member of the Bureau attended the Thirtieth Annual Congress on Medical Education, Licensure and Hospitals, held on February 12 and 13, 1934, Chicago. The representative's complete report appeared in the April number of THE JOURNAL.

#### VI. DIPHTHERIA IMMUNIZATION CAMPAIGN.

The Bureau of Publicity expresses its heartiest approval of the diphtheria immunization campaign as it was carried out in most places in Indiana. This campaign resulted not only in tremendous benefit to the public but the Bureau feels that the Indiana State Medical Association received more favorable comment for its efforts in this program than in any other program of public health education that has been presented since the creation of the Bureau of Publicity in 1922.

#### VII. QUACKERY.

During the year the Bureau issued statements upon such nostrums as Lash-Lure (a dangerous aniline hair dye), Kruschen Salts, Crazy Crystals, Marmola, and Croxon Cream.

#### VIII. PAMPHLET ON LYE BURNS.

The House of Delegates at the French Lick session approved the recommendation of the special Committee on Lye Burns that \$150.00 be appropri-

ated for the preparation of a pamphlet upon lye burns for lay consumption. This matter was referred to the Bureau of Publicity and the Bureau in turn asked the chairman of the Committee on Lye Burns to draft such a pamphlet. The Bureau has not yet received this draft.

#### IX. PROTEST OF THE BUREAU AGAINST ADVERTISEMENTS OF CLINICS.

During the year a large number of newspaper clippings from Indiana newspapers relating in a laudatory manner to members of two nationally known clinics were brought to the attention of the Bureau. The Bureau hopes that the clinics themselves may modify the statements which appear in these articles. The attention of the Bureau also was called to a large number of articles which appeared in the daily papers in Indiana in which the members of these clinics spoke upon subjects which are so visionary in nature that no one at the present time can have sufficient scientific knowledge to warrant such statements.

#### X. WHAT TO TELL THE PUBLIC ABOUT HEALTH.

The Bureau suggests that each county medical society which sponsors a health education or publicity campaign should obtain the book, "What to Tell the Public About Health," published by the American Medical Association.

#### XI. PUBLICITY FOR THE AMERICAN PUBLIC HEALTH ASSOCIATION.

At the request of the local chairman on arrangements for the American Public Health Association, the Bureau of Publicity aided in preparing the publicity for the annual meeting of that organization which was held in Indianapolis in October, 1933.

#### XII. SPECIAL COMMUNICATIONS WITH PAPERS.

Twice during the year the Bureau of Publicity prepared special letters which went sent to editors of papers in regard to letters that had appeared in their public comment columns. The following letter appeared in one of the papers of the state:

"To the Editor of The . . . . . :

"Illinois has recently enacted a law penalizing doctors who fail to medicate infants' eyes in the proper manner in the sum of \$100, with a jail sentence of six months. This is a step in the right direction, but if there is to be any penalty at all why stop at such a sentence? There are hundreds of sightless persons in Indiana today whose condition is traceable to wanton neglect by doctors and nurses who have paid no penalty for their culpable carelessness. A prison term of ten years would not be too much to impose either on a neglectful doctor or a nurse suffering from certain types of infection who handles an infant and infects its eyes. If it is argued that there is no need for such a law, the medical profession can have no material objection to its passage. More than half of all blindness today could have been prevented in one way or another. Yet year



after year no public effort is made to uproot the chief sources of blindness. When the blind demand aid from the community which has permitted the cause of their condition to exist, they are told that taxes are already too high.

"Welfare League for the Blind,  
"Morris B. Field."

The Bureau of Publicity prepared the following answer to this letter:

"Several weeks ago in your paper a letter appeared signed, 'Welfare League for the Blind, Morris B. Field,' in which doctors and nurses were rather seriously blamed for many cases of blindness.

"To say that 'a prison term of ten years would not be too much to impose either on a neglectful doctor or a nurse suffering from certain types of infection who handles an infant and infects its eyes,' is absolutely misleading.

"It would seem that your correspondent is grossly misinformed. Ophthalmia neonatorum, the disease to which he refers and the disease which is a very frequent cause of blindness, is primarily a venereal disease and is practically always transmitted to the baby's eyes from the mother's birth canal. The mother may be, and often is, unaware of her infection, but is entirely able to infect her baby's eyes.

"After conferring with many well known physicians and specialists in obstetrics, as well as eye specialists, we have been unable to trace one single case of this disease in this city to an infected physician or nurse.

"Furthermore, it is a standard routine for all physicians or nurses in attendance upon the delivery of babies in this state to cleanse promptly the baby's eyes and treat them with antiseptics in a manner to offer the greatest possible assurance against the transference of the parents' venereal disease germs to the baby's eyes.

"We are in hearty sympathy with any method or procedure which might prevent blindness and are constantly urging that all physicians and all nurses should do all within their power and knowledge to stamp out this serious disease, but we are forced by your correspondent to say that this letter both by direct statement and by inference deviated widely from fact."

The second letter, which follows, was in answer to a comment which was reported to have been made at a meeting that was held for the discussion of the Copeland-Tugwell bill, in which a representative of the Crazy Water Crystals Company stated that "all that is wrong with the patent medicine business is that we are selling too much and the doctors don't like it. We never have contended that patent medicine heals disease; it merely paves the way for the body to do its own healing."

"A statement appearing in a recent issue of The ..... by Mr. Perry Thomas, man-

ager of the Crazy Water Crystals Company, makes certain general allegations that the medical profession is opposed to such nostrums as Crazy Water Crystals because the sale of this product affects the doctor's business. This is not correct. The medical profession is critical of the claims made by patent medicines and nostrums such as Crazy Water Crystals because often there is no scientific basis for such claims.

"Crazy Water Crystals advertisements claim 'to relieve constipation, to aid elimination through kidneys and bowels, for rheumatic aches, arthritis, neuritis, upset stomach and excess acidity, biliousness, bad complexion, common colds, etc., when faulty elimination is a principal or contributing cause.' It is interesting perhaps to know that Glauber's salt is the predominating ingredient of this nostrum for which these claims are made and that for all practical purposes the makeup of this product is Glauber's salt with certain added amounts of washing soda, epsom salt, common salt and other salines for which the public pays \$1.50 a package which could be purchased for a few cents at any drug store."

#### XIII. MATERIAL UPON PUBLIC HEALTH TOPICS.

During the year the Bureau of Publicity has received and complied with many requests for material which would be helpful in preparing health talks. The Bureau has a great deal of this material on file and is very pleased to make it available to any physician desiring it. but the very best way of getting up-to-date information upon any subject that a physician may specify for such health talks is by addressing W. W. Bauer, M. D., director of the Bureau of Health and Public Instruction of the American Medical Association, who has on file material upon more than four hundred public health topics.

#### XIV. REQUEST FOR MATERIAL.

During the year the Bureau of Publicity received many requests for material and information on its work, among them being Melvin and Ronald, publicity agents, Boston, and the Minnesota State Medical Society which asked for information in regard to the institution of a speakers' bureau in that state.

#### XV. STAND OF BUREAU IN REGARD TO HEALTH SERVICES TO SCHOOLS.

The Bureau of Health and Public Instruction of the American Medical Association sent a questionnaire to the Bureau of Publicity concerning the part that the medical profession should play in rendering health services to schools. The Bureau made a general statement answering the questionnaire as follows:

"The policy, if adapted to school health services, would be that these services should absolutely be under the control and should be rendered under the guidance of the local county medical society. Conditions change from locality to lo-

cality but in Indiana under the new set-up of the State Board of Health each local county medical society has been made the principal agent in health education work. General rules and regulations have been established and each local county medical society has adopted these rules and regulations in accordance as they meet its own problems and situations. There is no doubt but school health services should be directly under the supervision of the local county medical society."

XVI. SUGGESTIONS IN REGARD TO THE WORK OF THE BUREAU.

The Bureau of Publicity always is pleased to receive suggestions and criticisms in regard to its work. It is far from a simple task to prepare weekly articles upon such a complicated thing as scientific medicine in a language that the average person can understand. The Bureau has attempted to the best of its ability to keep away from controversial subjects in its releases but it never has hesitated to strike hard and straight to the point whenever it has felt that the public should have the facts and know the truth. Necessarily, when this is done, certain well-meaning but misguided groups such as the Anti-Vivisection Society on the one hand, or a commercial outfit such as the profiteers of Crazy Crystal Waters and such nostrums, attack the Bureau. The Bureau expects such attacks and is neither disturbed nor alarmed by them and will continue its policy of giving to the best of its ability scientific facts in regard to diseases and public health, as a gratuitous service, to the public of Indiana.

XVII. SPEAKING ENGAGEMENTS.

The Bureau has felt that the number of speakers appearing on behalf of the Bureau should be increased. Hence, a statement has been sent to the secretary of each county medical society asking each secretary to send to headquarters office a list of local physicians and their subjects who might be available to speak before county medical societies and luncheon clubs. This list is to be compiled and sent to the secretary of each county medical society.

The Bureau once again desires to outline suggestions to physicians who are to make talks before lay audiences:

Such talks should be informative. They should be delivered in simple, understandable language, upon a topic which will be of interest to a lay audience. There should be no personal puffery.

During the year the Bureau supplied speakers for the following meetings:

- 1933
- Sept. 13—Second District Medical Society, Bloomington.
- Sept. 20—Parke-Vermillion County Medical Society, Clinton.
- Oct. 25—Eleventh District Medical Society, North Manchester.

- Nov. 1—Thirteenth District Medical Society, South Bend.
- Nov. 2—Clinton County Medical Society, Frankfort.
- Nov. 10—Carroll County Medical Society, Flora.
- Nov. 22—Parke-Vermillion County Medical Society, Clinton.
- Dec. 7—Rotary Club, Michigan City.
- Dec. 15—Washington High School, Indianapolis.
- 1934
- Jan. 31—Kiwanis Club, Marion.
- Feb. 12—Gibson County Medical Society, Princeton.
- Feb. 19—Madison County Medical Society, Anderson.
- Feb. 21—Parke-Vermillion County Medical Society, Clinton.
- Mar. 14—Parent-Teacher Association, School No. 85, Indianapolis.
- Mar. 22—Muncie Exchange Club, Muncie.
- Apr. 4—Shelby County Medical Society, Shelbyville.
- Apr. 5—Fountain-Warren County Medical Society, Kingman.
- Apr. 10—Rush County Medical Society, Rushville.
- May 1—Kiwanis Club, Greensburg.
- May 8—High School, Portland.
- May 8—Kiwanis Club, Portland.
- May 8—Rotary Club, Portland.
- May 8—Camp Fire Girls, Portland.
- May 29—Rotary Club, Mitchell.
- June 7—Fountain-Warren County Medical Society, Covington.

(This does not include a large number of requests received by the Bureau to aid the various county societies in obtaining speakers which they already had selected.)

XVIII. TALKS TO THE LAITY.

The number of talks to the laity in each county by the members of the county medical societies during the past year, as reported by the society secretaries to headquarters office, follows:

County Medical Society	Number of Talks
Allen .....	14
Carroll .....	4
Cass .....	7
Delaware-Blackford .....	
.....Numerous—exact number unknown	
Fountain-Warren .....	12
Gibson .....	2
Hancock .....	20
Hendricks .....	4
Henry .....	5
Howard .....	3
Huntington .....	3
Jackson .....	Some to the schools
Jasper-Newton .....	4
Jay .....	1
Jennings .....	1
Lake .....	43
LaPorte .....	3



Miami .....	About 25
Montgomery .....	14
Morgan .....	1
Noble .....	About 12
Randolph .....	2
St. Joseph .....	35
Tippecanoe .....	50
Vigo .....	15
Wells .....	12

#### XIX. NEWSPAPER RELEASES PUBLISHED SINCE LAST REPORT OF BUREAU.

July Fourth Injuries.  
 Group Hospital Insurance.  
 Lye and Lye Preparations as Poisons.  
 Good Health Exhibit at the Indiana State Fair.  
 Annual Session of Indiana State Medical Association at French Lick (8 releases).  
 A Word to Hunters.  
 Statewide Immunization Campaign Against Diphtheria.  
 Diphtheria Prevention.  
 The Common Cold.  
 Thanksgiving Eating.  
 When Winter Comes.  
 Diphtheria, the Disease.  
 Depression and Appendicitis.  
 Hoosier Basketball.  
 What About Our Drugs?  
 Results of Diphtheria Prevention Campaign.  
 May Day Preparations.  
 Graduate Educational Meeting of Indiana State Medical Association.  
 Spring Cleaning.  
 Indiana Mothers.  
 Your Doctor Attends a Convention.  
 Vacations and Typhoid.  
 A Safe and Sane Summer.  
 When to Remove Tonsils.  
 The Cancer Problem.

These releases were distributed as follows:

1. One hundred and fifty to the president of the White Cross Guild of the Indianapolis Methodist Hospital, for distribution to members of the guild.
2. Fifty to the director of the Division of Public Health Nursing of the Indiana State Board of Health.
3. Fifty to the state director of the Department of Health of the Woman's Christian Temperance Union of Indiana.
4. Each councilor and secretary of each county medical society gets a copy of each article.
5. Editors of two hundred newspapers and magazines of the state receive copies. Besides these, the articles often are carried in the *Hoosier Health Herald* of the Indiana Tuberculosis Association, and several other health publications of the state, including twelve religious, fraternal and farm journals.

In addition to these releases the Bureau of Publicity sponsored monthly articles which appeared in the bulletin of the Indiana Congress of Parents

and Teachers. The subjects of these monthly articles follow:

Greetings and Good Wishes from the Indiana State Medical Association.  
 Hoosierland's Health Harvest.  
 Diphtheria Immunization.  
 Health Resolutions.  
 A Child Shall Lead Them.  
 Immunization Campaign Gains Momentum.  
 Cleanliness Promotes Health.  
 The Home and the School.  
 "Package Education" in Hygiene.

#### XX. RADIO TALKS.

Radio talks, as follows, have been given each week through the year on Saturday night over station WFBM of Indianapolis:

The Common Drinking Cup.  
 Protection Against Typhoid Fever.  
 Running Water Is Not Always Pure.  
 Poison Ivy.  
 Lye as a Poison.  
 High Blood Pressure.  
 Competitive Athletics.  
 Hoosierland's Health Harvest.  
 Ventilation.  
 A Word to Hunters.  
 Statewide Immunization Campaign Against Diphtheria.  
 Diphtheria Prevention.  
 The Common Cold.  
 Thanksgiving Eating.  
 Observe Health Rules in Prevention of Colds.  
 When Winter Comes.  
 A Safe Christmas.  
 Holiday Health.  
 Health Resolutions.  
 Good and Bad Posture in Children.  
 Diphtheria, the Disease.  
 Depression and Appendicitis.  
 What About Our Drugs?  
 Sinus Trouble.  
 Hoosier Basketball.  
 Measles.  
 Spring Tonics and Spring Fever.  
 Result of Diphtheria Campaign.  
 Spring Cleaning.  
 Spring Exercise.  
 Home Safety.  
 Keep Your Eye on the Ball.  
 Vacations and Typhoid.  
 Indiana Mothers.  
 Strenuous Week Ends.  
 Prevent Hay Fever Now.  
 Safe and Sane Swimming.  
 Your Doctor Attends a Convention.  
 Infant Care in Warm Weather.  
 Hot Tips on Keeping Cool.  
 A Safe and Sane Summer.  
 Chiggers.  
 When to Remove Tonsils.  
 Poison Ivy.

Running Water Is Not Always Pure.  
The Cancer Problem.

#### XXI. FINANCIAL STATEMENT OF BUREAU.

The expenditures of the Bureau from August 1, 1933, to September 1, 1934, follow:

Clipping service .....	\$70.45
Postage .....	110.07
Stationery and mimeograph supplies.....	79.76
Printing .....	6.50
Traveling expenses of speakers.....	40.40
Historical work .....	10.60
Miscellaneous .....	8.38

Total expense .....\$326.16

The Bureau was allowed by the Budget Committee \$425.00 for the year of 1934. Of this amount the committee has spent \$174.86 from January 1 to September 1, 1934, leaving a balance of \$250.14 unexpended in the budget for the remainder of 1934.

#### XXII. CONCLUSION.

The Bureau wishes to thank especially the Indiana Tuberculosis Association, the State Division of Public Health, the Indiana Congress of Parents and Teachers, and the Indianapolis Better Business Bureau for their help and cooperation during the year. The Bureau has worked with each of these groups upon one or more projects during the year, among them being the celebration of May Day, Child Health Week, and the diphtheria immunization campaign.

*Tribute to the late Dr. Miles F. Porter.* In addition to the tribute paid Dr. Miles F. Porter printed in the January JOURNAL, the Bureau wishes to make the following comment:

Dr. Miles F. Porter was elected president of the Indiana State Medical Association in 1895 and he served as president during the meeting at Fort Wayne in 1896. His work was notable as a surgeon, as a teacher, and as a trustee of the American Medical Association. In addition to honors from the Indiana State Medical Association and the American Medical Association, he served as president of the Western Surgical Association and was a charter member and one of the organizers of the American College of Surgeons. For a number of years he served as chairman of the board of censors of the Indiana organization of the American College of Surgeons. For many years he was professor of surgery at the Fort Wayne Medical College and when that institution became affiliated with the Indiana University School of Medicine he served as professor on the new staff. After the death of the late Dr. Albert E. Bulson, Dr. Porter served as editor of THE JOURNAL of the State Association until the work was taken over formally by the Council.

Respectfully submitted,

WILLIAM N. WISHARD, M. D., Chairman.  
J. H. STYGALL, M. D.  
E. D. CLARK, M. D.

#### REPORT OF COMMITTEE ON CIVIC AND INDUSTRIAL RELATIONS

*House of Delegates, Indiana State Medical Association:*

Gentlemen: From a survey of the past efforts of this committee, it appears that the duties have been to receive complaints from the members of the Indiana State Medical Association, whenever a dispute arose between such members and an employer or his insurance carrier relative to the amount of the bill rendered for services to an employee of such employer. To date, this present committee has received no request for any assistance on such a matter and, therefore, is unable to render any report. All of the correspondence which was in possession of the former committee has been viewed by the chairman and one outstanding feature was noted in practically every case; the complaint of overcharge was due to the failure of the attending physician to set out in definite detail the exact and complete record of the injuries and the same as to the nature of the services rendered. In almost all cases when finally a settlement is made, it is on the basis of the original bill, after the employer and the insurance carrier have been fully advised as to the exact nature of the injury and the details as to services rendered.

Another point which is the frequent basis for dispute is in the matter of the period of medical treatment. The law sets out that the insurance carrier must furnish medical and surgical treatment for the first thirty days; however, where a request is made to the board for an extension of time before this period is ended, an additional thirty days will be given. We feel that if everyone who is rendering this type of service was familiar with this fact, and when it became apparent that additional time for treatment would be needed and the proper request made, many disputes would be avoided.

Finally, our executive secretary has brought to our attention the fact that since the lien law was passed at the last session of the legislature to protect the hospitals in automobile accidents is not generally felt to be satisfactory by the Hospital Association, and since the arrangement made several years ago with the insurance companies whereby patients made assignments of their insurance to physicians who rendered them treatment in automobile accident cases is not bringing the desired results, a new bill is being prepared by the Hospital Association to take care of the physicians and hospitals in these cases.

This bill, in effect, is to amend an act concerning liens in favor of hospitals only, in cases of personal injuries. It, as amended, would in a like manner make any doctor of medicine, surgery or doctor of dental surgery, regularly licensed to practice in this state, have the right to have a lien upon any judgment or money due or to become due to any person or persons by reason of any settlement with or without suit, except persons covered by the pro-



vision of the State or Federal Workmen's Compensation Act or Federal Disability Act.

We feel that this would be of distinct advantage to the doctors in this state and would enable them to collect many accounts due them for the treatment of personal injuries in which a settlement is made, which, at the present writing, they are all too frequently unable to do. We therefore give it our unqualified endorsement and support.

Respectfully submitted,

AUGUST F. KNOEFEL, M. D., Chairman.

W. A. MOORE, M. D.

A. J. LAUER, M. D.

## REPORT OF COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

*House of Delegates, Indiana State Medical Association:*

Gentlemen: The year 1934 has been a rather "lean" year for this committee, but few matters having been referred to it other than those of a routine nature.

The matter of having Indiana standardize her own hospitals has been considered by the Executive Committee of the State Association, but no definite action was taken. Your committee, however, feels that such a step would be unwise and unnecessary; in fact, with the hospital control exercised by both the A. M. A. and the American College of Surgeons, we see no need for a further standardization program.

The chairman attended the opening session of the Indiana State Hospital Association held in Chicago, on May second, and delivered the greetings of the Indiana State Medical Association to that body.

Your committee wishes to compliment the dean and other officers of the medical department of the Indiana University upon the many additions they have made to their courses and to the teaching staff; we feel that this institution has the undivided support of the medical profession of Indiana.

Respectfully submitted,

T. W. OBERLIN, M. D., Chairman.

DAVID A. BICKEL, M. D.

C. P. EMERSON, M. D.

## REPORT OF COMMITTEE ON NECROLOGY

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

"The Doctor—Supreme of All."

Such is the place given to the "Guardians of Health" by Ella Wheeler Wilcox when she said of the doctor:

It is easy enough to be pleasant

When life flows like a song;

But the man worth while

Is the man who will smile

When everything goes wrong.

For the test of the heart is trouble,

And it always comes with years;

And the smile that is worth

The praises of earth

Is the smile that shines through tears.

And thus she tells us that "As a man thinketh in his heart, so is he." Miss Wilcox tells us that the doctor's true character is not determined by his words or his appearance, or even by his acts, but by the innermost thoughts of his heart. Hidden in these few words is the secret of health and successful happiness. Thus does the "Diadem of Poets," as she has been deservedly named, place in supreme command of all human endeavor "The Doctor."

We include in this report the 99 good, loyal defenders of the health, happiness and prosperity of the human family, who "laid their heavy burdens down" during the year beginning August 1, 1933, and ending August 1, 1934. Happy is your committee to note that this number is a decided decrease from last year when the number was 115, the greatest number by far in the existence of the committee.

The oldest of these men was Dr. Zack H. Hauser, who died in Columbus, Indiana, August 4, 1933, at the advanced age of 94 years.

The youngest was Dr. Theodore David, a colored physician of Indianapolis, who died August 22, 1933, at the age of 28—a mere youth.

One had been president of the Indiana Medical Association in 1896—Dr. Miles F. Porter of Fort Wayne.

The age groups of these doctors are interesting. One died in his 28th year of life; 5 between 30 and 40; 4 after 40 and before 50; 18 in the fifties; 27 in the sixties; 21 between 70 and 80; 20 in the eighties, and 3 after 90.

The Medical College of Indiana and Indiana University graduated 27; Kentucky School of Medicine, 6; Western Reserve, 6; Rush, 10; Physio-Medical of Indianapolis, 3; Eclectic of Indianapolis, 3; Medical College of Ohio, 6; Chicago Homeopathic, 5; Bellevue, 7; Northwestern, 10; Jefferson Medical, 6; Fort Wayne, 5; P. and S. of Indianapolis, 3; Baltimore Medical, 2.

Heart disease, with its 27 victims, held first place in the causes of death. Pneumonia came second with 21. Cancer, all organs, 14; Bright's disease had 13; diabetes took 8; diseases of liver and gall bladder claimed 6; influenza marked 5; accidents, automobile, 1, drowning, 2; and suicide, 2.

The average time spent in the practice by each physician was approximately 29 years and 3 months. Total number of years of service to sick and suffering humanity by these doctors was 2,871. The combined ages of all that could be accurately tabulated, 7,053. The average of life among the practitioners was 71+ as compared with 62.5 of those of the previous year. The span of life among physicians is thus shown to be on the increase since

the beginning of this department of the service offered to the members.

February of 1934 led the months in toll with 13 deaths; January of 1934 came second with 12; December of 1933 and June of 1934 each took 11; October of 1933 and May of 1934 claimed 9 each; March of 1934 had 8; while April of the same year demanded 7; July of 1933 listed 6; August of 1933 drew 5 and finally September and November of 1933 finished with 4 each.

And so the curtain of Time goes down on the history of the most noble, useful and unselfish of all professions for another year.

"So they braved the dark and they braved the pain,  
And they thanked the Lord for the falling rain,

For their sun will shine tomorrow;  
For it's out of their care that their joys are born,  
The loveliest rose MUST WEAR ITS THORN,

And the TENDEREST HEART MUST SORROW.  
But it's out of their hurts and the griefs they bear  
That blossoms the loveliest smiles they wear."

—Edgar A. Guest.

Respectfully submitted,  
GEO. G. RICHARDSON, M. D.,  
Chairman.

#### REPORT OF COMMITTEE ON SECRETARIES' CONFERENCE

*House of Delegates, Indiana State Medical Association:*

Gentlemen: Last January the county secretaries had the most successful meeting at the Lincoln Hotel, Indianapolis, that they have ever had. The attendance was the largest ever, and the program the best of any.

Dr. Nathan B. VanEtten, of New York, Reverend A. M. Schwitalla, of St. Louis, Dr. W. W. Bauer, of Chicago, Dr. H. Jackson Davis, of Washington, D. C., and last, but not least, our dear friend, Dr. Olin West, of the A. M. A., addressed the conference.

Dinner was served in the evening.

Respectfully submitted,  
A. M. MITCHELL, M. D., Chairman.  
S. T. MILLER, M. D.  
CLAUDE B. PAYNTER, M. D.  
O. M. GRAVES, M. D.  
E. H. BRUBAKER, M. D.  
J. L. ALLEN, M. D.

#### REPORT OF COMMITTEE ON GRADUATE EDUCATION

*House of Delegates, Indiana State Medical Association:*

Gentlemen: The Third Annual Graduate Education Meeting of the Indiana State Medical Association was held in Evansville, Indiana, on April 26, 1934, in conjunction with the First District Medical Society.

The meeting from the standpoint of the state committee as well as the local committee was very successful in spite of the inclement weather. There

were 134 men enrolled. Three out-of-state speakers were headliners, with the rest of the program made up of Indiana men. It appeals to the committee that we have in Indiana, many men capable of appearing before a group interested in postgraduate study. These men are well founded and show ability along teaching lines. It is the feeling of the committee that these men should be encouraged, and other men, more reticent to appear, and yet equally capable, should be enlisted on such programs. We believe that the importation of speakers into this state for such meetings can well be cut to a minimum.

The financial statement shows a balance from previous courses of \$73.89, with a receipt on April 26, 1934, for \$124.45, making a total of \$198.35. The total expenses of the committee including importation of out-of-state speakers, postage, printing, and badge inserts was \$206.41, making a deficit of \$8.07. Considering the weather conditions, this seems to be a reasonable cost for such an ambitious program as was put over.

The course which was offered was of a very practical nature, designed for the benefit of men in general practice. Newer methods of treatment and diagnosis were points which were particularly stressed. It is obvious that by using competent Indiana men, such a course of great value to practitioners can be put over at a minimum of expense to either the individual or the Association.

Respectfully submitted,

C. J. CLARK, M. D., Chairman.  
B. G. KEENEY, M. D.  
KEITH T. MEYER, M. D.  
ROBERT M. MOORE, M. D.  
W. L. PORTEUS, M. D.  
WALTER H. BAKER, M. D.  
M. J. BARRY, M. D.  
W. D. GATCH, M. D.

#### REPORT OF DIPHTHERIA PREVENTION COMMITTEE

*House of Delegates, Indiana State Medical Association:*  
Gentlemen:

The Diphtheria Prevention Committee of the Indiana State Medical Association is pleased to report that diphtheria is now at the lowest level that has ever been reported. There have been forty-seven deaths in the entire state for the first seven months of the year. This compares with fifty-nine, which was the previous low figure established in 1931.

The committee has had one meeting to consider ways and means by which diphtheria may be reduced to the lowest possible level, and the members are contemplating another meeting at the time of the State Medical Association meeting in October.

We have continued our former policy of keeping the profession informed concerning diphtheria, and of fostering preventive measures. The committee has not, and does not, contemplate making an active



campaign. We believe that all such activities should be originated and carried out by local medical societies.

Respectfully submitted,  
 THURMAN B. RICE, M. D., Chairman.  
 E. V. WISEMAN, M. D.  
 E. N. MENDENHALL, M. D.  
 J. O. RITCHEY, M. D.  
 AUSTIN SWEET, M. D.

#### REPORT OF COMMITTEE ON THE STUDY OF HEALTH INSURANCE

*House of Delegates, Indiana State Medical Association:*  
 Gentlemen:

The possibilities of socializing the medical profession through health insurance and its ramifications have not been appreciated until the recent meeting of the American Medical Association brought out a reaction to various plans being promulgated by various organizations. Since then, the further statement was made from Washington that unemployment insurance, old age insurance and health insurance were to be given consideration as part of the program for the immediate future, and we find the profession actually taking enough interest in the matter to desire such information as can be supplied. The April number of the *Bulletin of the American Medical Association* is the best reference we can give up to the present time. In the near future Dr. R. L. Sensenich, of South Bend, will have completed an exhaustive study of the information on file in the headquarters office in Chicago, and will give us a review of the matter brought up to date.

Only through a knowledge of the many unfavorable aspects of socialized medicine, as it has been so unsatisfactorily tried out in other countries, will we be able to prevent, by education, the fostering of a political-medical set of job holders on to the great majority of our citizens, and prevent the breaking up in its entirety of all the former necessary and most desirable relationships between the members of the medical profession and their patients.

Respectfully submitted,  
 M. A. AUSTIN, M. D., Chairman.  
 WALTER KELLY, M. D.  
 O. R. SPIGLER, M. D.  
 BEN MOORE, M. D.  
 A. E. STINSON, M. D.

#### REPORT OF COMMITTEE ON VETERANS' HOSPITALIZATION

*House of Delegates, Indiana State Medical Association:*  
 Gentlemen:

The only change in legislation in regard to the affairs of this committee was the enactment of rules by the last session of Congress permitting veterans with non-service connected disabilities, if wholly indigent, to be hospitalized in veterans hospitals. This point is one which is undoubtedly debatable and even members of your committee are not wholly agreed upon it, but inasmuch as the

requirements showing total inability to pay are at present very rigid and the question resolves itself into one as to whether the veteran become a charge upon the government or some other taxing body, it seems to us that it is not one of serious import to the medical profession.

During the last few months your committee has interested itself in a new medical set-up in the American Legion of Indiana. This plan contemplates the appointment of a department surgeon, district surgeons in each district of the state and post surgeons for every Post of the American Legion. The plan was originated in Illinois, has been adopted by several other departments of the Legion and so far as your committee has been able to ascertain has worked out well not only for the veterans but for the medical profession. This organization would have general charge of all medical matters relating to veterans and being composed entirely of physicians would not have the disadvantages of various committees composed of mixed membership of physicians and laymen. The American Legion, at its annual convention at Gary, adopted this plan and will immediately put it in execution. The Illinois State Medical Society approved a similar plan in that state and this committee recommends that the Indiana State Medical Association go on record as approving it and urging all of its members who are also members of the American Legion to cooperate toward its success.

Respectfully submitted,  
 C. C. BASSETT, M. D., Chairman.  
 F. S. CROCKETT, M. D.  
 I. M. CASEBEER, M. D.  
 R. A. CRAIG, M. D.  
 W. A. DOEPPERS, M. D.

#### REPORT OF COMMITTEE ON STUDY OF HIGH SCHOOL ATHLETICS

*House of Delegates, Indiana State Medical Association:*  
 Gentlemen:

Last year this committee was able to show that occasionally there was inadequate examination of those boys engaging in competitive athletics, and that occasionally community and family feeling might tend to override medical judgment in the care of a convalescent athlete. Also, there were times when the coach and examining physician disagreed as to the fitness of a given boy for participation. We are assured by the authorities of the Indiana State High School Athletic Association that there has been fine cooperation this past year, and a better understanding of the problem by all concerned.

In addition to the routine examination of all boys participating in high school basketball, football, and track, a special examination was asked for by Mr. A. L. Trester. This examination was done on all boys on the teams participating in the final tournament at Indianapolis. Each of these participants was examined the week before the tournament by the following physicians:

*Wabash:* Dr. R. M. LaSalle, Dr. F. M. Whisler, Dr. J. W. G. Stewart, Dr. L. O. Sholty, Dr. E. D. Pearson.

*Technical (Indianapolis):* Dr. Francis C. Smith.

*Richmond:* Dr. J. M. Fouts, Dr. F. E. Hagie, Dr. J. H. Kinsey, Dr. F. W. Krueger.

*Princeton:* Dr. C. A. Miller, Dr. O. T. Brazelton, Dr. Virgil McCarty.

*North Vernon:* Dr. J. H. Green.

*North Judson:* Dr. P. O. Englerth, Dr. Albert Fisher.

*Logansport:* Dr. J. J. Stanton.

*Lebanon:* Dr. R. S. Ball.

*Jeffersonville:* Dr. H. H. Reeder.

*Jasper:* Dr. Leo A. Salb.

*Hammond:* Dr. H. G. Cole, Dr. C. A. McVey.

*Hartford City:* Dr. C. A. Sellers.

*Greencastle:* Dr. Gilbert D. Rhea, Dr. W. M. McGaughey, Dr. Cassel C. Tucker.

*Brazil:* Dr. L. R. Hirt.

*Batesville:* Dr. J. T. Carney, Dr. John C. Bigham.

*Beaver Dam:* Dr. H. C. Bowers.

This committee feels that it should continue to emphasize careful examination of those boys taking part in strenuous athletics, not only at the beginning of competition, but throughout their athletic careers.

Respectfully submitted,

W. D. LITTLE, M. D., Chairman.

J. E. P. HOLLAND, M. D.

H. C. WADSWORTH, M. D.

R. H. PIERSON, M. D.

O. H. BAKEMEIER, M. D.

#### REPORT OF THE COMMITTEE ON PUBLIC RELATIONS

*House of Delegates, Indiana State Medical Association:*

Gentlemen: Your Committee on Public Relations received the following letter from the Executive Committee on May 24, 1934:

"At the regular monthly meeting of the Executive Committee on May 13, the suggestion was made that a thorough search be made through the records, the charter and all other sources for information in regard to the legal status of pay beds in the Long and Coleman hospitals. In making this suggestion the Executive Committee had in mind the work done by your committee and the report made to the House of Delegates last year.

"It is the understanding of the committee that the Riley Hospital has no pay beds. The committee would like to have an official report upon this matter also."

Your committee wishes to point out once again that the information in regard to the legal status of pay beds in the university hospitals was covered completely in its report to the House of Dele-

gates in 1933. Hence, we respectfully refer those interested to the report of this committee which appeared on pages 477 to 479 in the September, 1933, number of THE JOURNAL and was copied in the handbook of the House of Delegates. However, to re-establish the facts in this case with the Executive Committee, we discussed this matter with Mr. J. B. H. Martin, administrator of the Indiana University School of Medicine and Hospitals, who wrote the following letter to the committee:

"May 28, 1934.

"Relative to your inquiry as to whether or not there are pay beds in the Riley Hospital, I am glad to give you the following information:

"'All patients admitted to the Riley Hospital for Children are committed by the judge of any circuit, criminal or juvenile court, and the cost of hospitalization is paid for by the county in which the child has a legal settlement. We have no pay beds in the Riley Hospital and accept no private cases.'

"I am enclosing herewith copies of the statutes governing the admission of patients to the Riley Hospital."

To carry the matter further the committee felt that it would be well to ascertain, insofar as possible, the spirit animating those who made the bequests to the university, and at the suggestion of Mr. Albert Stump, attorney for the Association, questionnaires were sent to Mr. William H. Coleman, of Indianapolis, donor of the Coleman Hospital, and to Mrs. Clara J. Long, wife of the late Robert W. Long. The letter from Mr. Stump, containing this suggestion, follows:

"September 14, 1934.

"My dear Dr. Garshwiler:

"Upon your request we have given further study to the Coleman and Long Hospital situation. We have checked over our opinion of August 3, 1933, in which we stated what we felt were the legal implications in the acceptance by the state of the donations in each case.

"In the use of a gift made for a charitable purpose the purposes to be accomplished by the gift should control as a matter of law. Since the donor of the Coleman Hospital gift is still living, an inquiry as to the purposes of the gift could be conducted through an interview with the donor himself. I would suggest that that be done in order to clarify further, if that is possible, any uncertainty as to the manner in which the hospital is being conducted. This can be done also in regard to the Long Hospital through an interview with Mrs. Long, who, as I understand, had an interest or at least was familiar with all of the matters involved in the donation for the Long Hospital. I would suggest in general that answers to the following questions be obtained from these donors as to each of the two hospitals:



"1. State as fully as possible what the purpose was which was intended to be accomplished by the donation, having in mind in the statement whether or not it was solely for the purpose of providing hospital facilities for the care of the poor, or whether it included also the providing of teaching facilities in connection with the treatment of those who could pay for their medical and hospital care.

"2. State whether or not in the making of the donation there was under consideration the problem of what would be an adequate number of pay beds for teaching facilities, and whether or not there was any intention in connection with the gift in regard to the number of such pay beds, and what that intention was.

"3. What is your judgment with reference to the number of pay beds now in the hospital being required or not required, as the case may be, to accomplish the purpose you had intended by the donation?

"4. Would a reduction in the number of pay beds, in your judgment, change the nature of the hospital so that facilities and opportunities for teaching in connection with the care of paying patients would be hampered or limited, and the purpose of the donation in any way be thwarted or its accomplishment interfered with?

"5. If a change in the number of pay beds is made, would that have any effect, in your judgment, on the possibility of obtaining further donations from other donors, and in that manner obstruct or delay the further growth and development of the hospital?

"There may be other questions that will occur to you, but it seems to me that these questions, if the answers are full and complete, will serve to disclose what the purposes of the donors were as to each hospital and whether or not they would be disposed to make any objections to changes in the management in regard to the number of pay beds."

The questionnaire and answers follow:

"Indianapolis, Ind.,  
September 14, 1934.

"Dear Dr. Garshwiler:

"Complying with your request, I am answering herewith the questions submitted by you at the suggestion of Mr. Albert A. Stump in his letter of this date addressed to you:

"Question 1. State as fully as possible what the purpose was which was intended to be accomplished by the donation, having in mind in the statement whether or not it was solely for the purpose of providing hospital facilities for the care of the poor, or whether it included also the providing of teaching facilities in connection with the treatment of those who could pay for their medical and hospital care.

"Answer. My purpose in making my gift to the trustees of Indiana University for the construction of the William H. Coleman Hospital for Women on the campus of the Medical School and hospitals of Indiana University was to provide a hospital for the care and treatment of women, including both patients who are able to pay part, or all, of the expense of their care, and patients who are not able to pay for such care, the expense of meeting such service to patients who are unable to pay for such care to be met by appropriations from time to time by the legislature to the trustees of Indiana University for that purpose. All of which was authorized by act of the legislature approved March 10, 1927 (Acts 1927, page 607).

"Question 2. State whether or not in the making of the donation there was under consideration the problem of what would be an adequate number of pay beds, and whether or not there was any intention in connection with the gift in regard to the number of such pay beds, and what that intention was.

"Answer. There was the understanding that one floor should be used for pay patients and that the remaining beds in the hospital should be used for those who were able to pay part only or nothing. The intention in this connection was that the income from such pay patients would be applied upon the expense of the operation of the hospital, and the request for aid from the legislature would be reduced to that extent.

"Question 3. What is your judgment with reference to the number of pay beds now in the hospital being required or not required, as the case may be, to accomplish the purpose you had intended by the donation?

"Answer. In my judgment, I do not think a less number than those now so used would accomplish the purpose I had in mind when I made my gift.

"Question 4. Would a reduction in the number of pay beds, in your judgment, change the nature of the hospital so that facilities and opportunities for teaching in connection with the care of pay patients would be hampered or limited, and the purpose of the donation in any way be thwarted or its accomplishment interfered with?

"Answer. I think any reduction in the number of pay beds would entirely change the nature of the hospital, and that facilities and opportunities for teaching in connection with the care of such patients would be much hampered and my purpose in the establishment of the hospital practically thwarted. In this connection, I am having in mind the great service such facilities furnish for students in the training school for nurses and internes in the hospital.

"Question 5. If a change in the number of pay beds is made would that have any effect, in your judgment, on the possibility of obtaining further donations from other donors, and in that manner obstruct or delay the further growth and development of the hospital?"

"Answer. I most certainly think that any change made in the carrying out of the gift would practically stop further donations from other donors to such purposes as I had in mind and thereby both obstruct and greatly delay or prevent the further growth and development of the hospital. Personally I do not think the understanding under which such a gift is made could be modified subsequently in good faith.

"I am glad that this matter has arisen at this time because I am able now to affirm my original intentions when the gift was accepted by the university.

"Very truly yours,  
(Signed) WILLIAM H. COLEMAN."

"Indianapolis, Indiana,  
September 14, 1934.

"Dear Dr. Garshwiler:

"I am glad to answer the questions submitted by Mr. Stump to you in his letter of September 14 to the best of my recollection:

"Question 1. State as fully as possible what the purpose was which was intended to be accomplished by the donation, having in mind in the statement whether or not it was solely for the purpose of providing hospital facilities for the care of the poor, or whether it included also the providing of teaching facilities in connection with the treatment of those who could pay for their medical and hospital care.

"Answer. Dr. Long intended that the hospital should provide for charity patients, for pay patients and for patients who could pay for only part of their care.

"Question 2. State whether or not in the making of the donation there was under consideration the problem of what would be an adequate number of pay beds, and whether or not there was any intention in connection with the gift in regard to the number of such pay beds, and what that intention was.

"Answer. Yes. Dr. Long wished to have one floor of the hospital devoted to private patients, and approved of the plans for this floor.

"Question 3. What is your judgment with reference to the number of pay beds now in the hospital being required or not required, as the case may be, to accomplish the purpose you had intended by the donation?

"Answer. There is just the number of private beds he wished to have.

"Question 4. Would a reduction in the number of pay beds, in your judgment, change the

nature of the hospital so that facilities and opportunities for teaching in connection with the care of pay patients would be hampered or limited, and the purpose of the donation in any way be thwarted or its accomplishment interfered with?

"Answer. Yes. A reduction in the number of pay beds would be contrary to Dr. Long's wishes.

"Question 5. If a change in the number of pay beds is made, would that have any effect, in your judgment, on the possibility of obtaining further donations from other donors, and in that manner obstruct or delay the further growth and development of the hospital?

"Answer. Yes. No one would give money to an institution which did not live up to its sacred agreement.

"I may say that the purposes and intentions of Dr. Long in making his gift to the trustees of Indiana University for the establishment of the Robert W. Long Hospital were talked over with me in much detail, and I agreed fully with Dr. Long's purposes in making the gift for the hospital, all of which was covered by our letter addressed to the trustees of Indiana University and incorporated in the act authorizing the establishment of the hospital by the legislature at its session in 1911.

"Very truly yours,  
(Signed) CLARA J. LONG.  
(Mrs. Robert W.)."

#### CONCLUSION

In conclusion, your committee presents this to the House of Delegates for its consideration without any further suggestions.

Respectfully submitted,

W. P. GARSHWILER, M. D., Chairman.  
O. G. BRUBAKER, M. D.  
H. L. MURDOCK, M. D.  
R. L. SENSENICH, M. D.

#### REPORT OF COMMITTEE ON LYE BURNS IN CHILDREN

*House of Delegates, Indiana State Medical Association:*

Gentlemen: In accordance with the recommendations made by this committee last year, and adopted by the House of Delegates at the French Lick session, your committee hopes to have prepared and presented to the 1935 session of the legislature a bill which will make the Indiana statutes conform to the model law as drawn up by the Committee on Lye Legislation of the American Medical Association.

Last year your committee recommended and received from the House of Delegates an appropriation of \$150 to print an educational pamphlet for



lay consumption to prevent needless suffering on the part of little children from corrosive action of commercial lye preparations. This matter was placed before the Bureau of Publicity, and the Bureau has suggested that the committee should supply the material to go in such a pamphlet, and when such material is prepared the Bureau has promised its complete help and cooperation in the preparation and distribution of the pamphlet.

Respectfully submitted,

D. O. KEARBY, M. D., Chairman.  
E. L. BULSON, M. D.  
MATTHEW WINTERS, M. D.  
O. D. HUTTO, M. D.

#### REPORT OF THE COMMITTEE FOR THE STUDY OF PUERPERAL MORTALITY

*House of Delegates, Indiana State Medical Association:*

Gentlemen: The Committee for the Study of Puerperal Mortality having at hand no comprehensive data relative to the problem in Indiana, made a study of the three year analysis of maternal mortality in New York City, which compilation was made by the New York Academy of Medicine.

From this study we made such observations as could be applied to conditions in the state of Indiana considering the following differences: (1) in population types; (2) in distribution of people in the state; (3) in the medical services available in this commonwealth.

Various personal contacts were made with medical and lay groups as well as individuals throughout the year.

A study was made of the Indiana plan of health administration.

With this background we found some thirty major headings for constructive recommendations to this Association. Of these we have chosen for your consideration the following:

The committee commends and desires to encourage the cooperation of the Division of Public Health, the Indiana University School of Medicine and the Indiana State Medical Association in their efforts to improve obstetrical care.

We recommend that the medical profession should accept its part of the responsibility for puerperal mortality. We specifically call attention to the dangers of puerperal sepsis; injudicious use of pituitary substances; and to incomplete study of the individual case leading to errors in judgment.

We recommend and urge that this Association undertake, through the proper channels, the instruction of the child-bearing public in each county of this state regarding the large part of the responsibility for puerperal mortality they now carry and of which, we believe, they are unaware.

We recommend that in Indiana any well woman who is pregnant, being married, consulting regu-

larly a trained, conscientious licensed physician, arranging to pay fairly for her care, need have little fear about the reproduction of her kind in safety.

Respectfully submitted,

E. O. ASHER, M. D., Chairman.  
L. H. ALLEN, M. D.  
R. W. SHANKS, M. D.  
ROSS COOPER, M. D.  
J. H. CROWDER, M. D.

#### REPORT OF COMMITTEE ON STATE FAIR

*House of Delegates, Indiana State Medical Association:*

Gentlemen: This year's exhibit, the second one sponsored by the Indiana State Medical Association, featured color blindness testing. We felt that it would be of interest to know how many color blind individuals drive cars and perhaps unknowingly run stop signs.

Our examinations have disclosed a number of men who, under our present system of traffic signals, are dangerous drivers because of their inability to correctly distinguish red from green.

The method of examination was that improvised by Professor S. Ishihara of Tokio. It is accurate, and could be adopted for driver's license tests by the state at practically no expense.

4,442 individuals were examined; 2,079 males and 2,363 females.

156, or 7.5% of the males were color blind in some degree.

10, or .423%, of the females had impaired color vision.

Only 66 of the 166 color blind individuals knew of their defect.

Only 22 of the 166 admitted any trouble at stop lights, although a large number said they could not recognize the lights until they were much closer to them than was necessary for other members of the family.

Only 24 of the 166 gave a family history of color blindness.

Visual acuity tests run on the color blind individuals revealed that there was no correlation between their impaired color vision and their visual acuity. Three hundred seventy-one visual acuity tests were also run on individuals with normal color vision.

These statistics may be subject to some criticism. Some people, knowing they were color blind, naturally would be interested in having their eyes checked. On the other hand some who did not know they were color blind became aware of the fact by watching others read the charts and refused to be tested themselves.

Other features of our exhibit were posters, mechanical devices, and information concerning cosmetics; general information on health, and an exhibit on eye injuries. This latter showed playthings which might cause eye injuries and called attention to the need for caution in their use.

Several hundred copies of *Hygeia* were given away, and Miss Dorothy Rose, a graduate from the University Hospitals, was present to explain the merits of the publication.

The examinations were done by Dr. Hugh Martin and Dr. C. E. Moehlenkamp. A member of the committee was in charge of the exhibit each day.

It is of interest to state that a number of people came to inquire whether the Association was taking blood pressures again this year. On questioning them we were usually informed that they were keeping a check on their blood pressure through their family physician. We feel that in spite of some adverse criticism pointed toward this feature of the exhibit last year, more good than harm was done by making the public self-conscious of its health.

A detailed report of this year's exhibit appears on page 498 in this issue of *THE JOURNAL*.

Respectfully submitted,

RUSSELL SAGE, M. D., Chairman  
J. E. FERRELL, M. D.  
REYNOLDS HICKMAN, M. D.  
E. W. DYAR, M. D.  
MELVIN MASTERS, M. D.  
RALPH MCQUISTON, M. D.

## REPORT OF COMMITTEE ON MENTAL HEALTH

*House of Delegates, Indiana State Medical Association:*

Gentlemen: The Committee on Mental Health of the Indiana State Medical Association appointed for the fiscal year of 1933-1934 is a new organization, the outcome of recommendations made in a report by a special Committee on Mental Health of the American Medical Association at the Milwaukee meeting in 1933. The report of this committee was exhaustive and comprehensive, the final recommendations being to the effect that there be appointed a Bureau or Committee on Mental Health within the American Medical Association, the function of this body being to enable the profession as a whole to assume leadership in mental health, which is its proper responsibility. To accomplish this purpose four subdivisions were recommended:

1. Psychiatry in relation to medical education and hospitals.
2. Public policies and procedures in mental health administration.
3. Research in mental health.
4. Dissemination of information.

With these recommendations in mind your committee has hoped to work along the same lines.

It is very doubtful if the profession as a whole is acquainted with the problems encountered in the care of the mentally ill, or if there is a clear understanding of the facilities provided by the state, county, municipalities and other agencies for the study and treatment of such cases.

For the care of the legally declared insane, Indiana provides five state hospitals with a total bed capacity of about 7,000. These institutions are overcrowded and have long waiting lists. Marion County maintains a hospital for chronic cases, and other counties have many of their incurables in the local infirmaries and almshouses. The Indianapolis City Hospital maintains a psychopathic ward on which acute cases and those awaiting commitment are treated. The Indianapolis City Dispensary provides a large out-patient neuropsychopathic department which, like the City Hospital, serves only the city of Indianapolis. No other county or municipality is equipped properly to care for acute psychopathic conditions except by confinement in jails while awaiting commitment to the state hospitals. The University Hospitals receive many psychiatric cases but these institutions are not provided with adequate facilities or equipment to study and treat such cases. In addition, an out-patient department in connection with the University School of Medicine has been in operation for a number of years. The Epileptic Village, the School for the Feeble Minded and the Hospital for the Criminal Insane care for their own special classes of cases under legal authority.

This, briefly, is the set-up for the care of the mentally ill in Indiana, and it seems that the fundamental principles are sound, and that with increased funds, which would provide the necessary material and personnel for expansion and development, adequate care for both ambulatory and institutional cases could be given.

This set-up, however, refers only to the indigent. If the population of the state could be divided into two groups, the rich and the poor, the problem would be easy. Unfortunately, the great mass of the population belongs to the middle class who should not be and who do not wish to be pauperized by state or municipal aid, and who on the other hand are not financially able to meet the huge expenses necessary for private care. To distinguish between those who are and those who are not deserving of public aid is a social problem not properly within the scope of this committee, yet of such importance that later your committee will presume to make certain recommendations. During the past year two communications have been referred to this committee by your Executive Committee. One by Dr. Max Bahr, representing the Governor's Welfare Committee, which recommended the establishment in connection with each of the state hospitals of a complete diagnostic clinic including out-patient, social service, lay educational and public information departments. This idea was such a departure from existing conditions that the chairman of your committee thought it wise to expand the membership. Consequently fifteen advisory members were added. This committee met on June 20, 1934, and after much discussion a motion to recommend Dr. Bahr's proposition was voted down, the general feeling being that such a plan



of decentralization was inadvisable both from an economic and a professional standpoint.

Under date of July twentieth a communication was received from Dr. F. F. Hutchins in which he described the present set-up for the teaching of neuropsychiatry in the Indiana University School of Medicine and the care of the mentally ill in the University Hospitals and out-patient clinic.

Psychiatry is a highly specialized branch of medicine and should *always* be under the immediate control of medical men with this in mind and, following the recommendations of the National Committee on Mental Health, your committee proposes to study this question from several angles among which may be mentioned:

1. Special training of medical students, internes, nurses, social workers and psychiatric assistants.
2. Hospitals: (a) State insane hospitals; (b) other state and county institutions for the care of the mentally ill; (c) psychopathic departments in connection with public and private general hospitals.
3. Out-patient clinics: (a) For mild psychotic and psychoneurotic conditions; (b) behavior problems; (c) social adjustment; (d) child guidance, etc.
4. Medico-legal problems.
5. Financial needs to maintain and expand the present set-up for the care of the mentally ill.
6. Study of the economic status of those seeking public aid.
7. Research in mental health.
8. Dissemination of information through your Bureau of Publicity.

We realize that thus far your committee has accomplished very little; we appreciate the importance of the problems to be met; we are cognizant of the inadequate facilities for the care of the mentally ill; and we are fully aware of the necessity of prophylactic measures to lower the steadily mounting percentage of psychiatric disturbances. However, we feel that a few practical, feasible recommendations will accomplish far more than volumes of sentimental discussion and statistical data.

Respectfully submitted,

L. D. CARTER, M. D., Chairman.  
JOHN H. HARE, M. D.  
L. E. PENNINGTON, M. D.

#### REPORT OF DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

The report for delegates, prepared by Dr. R. L. Sensenich, of South Bend, delegate to the Cleveland session of the American Medical Association, was published on page 307 in the July, 1934 issue of *THE JOURNAL*. Notes from the session were prepared by the executive secretary, Mr. Hendricks, and published on page 309 in the same issue.

#### REPORT OF THE STATISTICIAN

*House of Delegates, Indiana State Medical Association:*

Gentlemen: During 1934, articles have been prepared for *THE JOURNAL* concerning the distribution of officers of the American Medical Association and authors of original articles in *THE JOURNAL* of the Indiana State Medical Association. These reports are to be found in *THE JOURNAL*, Volume 27, pages 227, 269, and 405. In addition, a report was made to the Executive Committee upon a proposed plan of making a medical survey of the State of Indiana with regard to medical and health facilities.

Respectfully submitted,

ALEXANDER CAVINS, M. D.,  
Statistician.

#### REPORT OF THE HISTORIAN

*House of Delegates, Indiana State Medical Association:*

Gentlemen:

With the many active and urgent problems, medical, social, economic, and even political, confronting the officers of the Indiana State Medical Association at this time, the matter of a report of the activities of the Historian for the year 1934 seems somewhat sacrilegious in disturbing the quiet and peaceful affairs of the nearly forgotten past.

Various newspapers have been examined for entries relative to the medical history of the Old Northwest, Indiana Territory, and the State of Indiana. Abstracts and copies of pertinent articles have been made and filed. The *Western Sun*, published first in 1804 at Vincennes, has been found to contain much important information. The *Indianapolis Journal*, first published shortly after the settlement of Indianapolis in 1821, has likewise been found a rich source of material. The examination of newspaper material is both tedious and time-consuming. It is planned, however, to make a systematic study of all of the available newspaper files in the state up to 1850, at least.

The matter concerning the status of early medical education in Indiana is in the process of investigation. Since the first medical school on an organized basis did not open its doors until 1840, at LaPorte, Indiana, the question of medical education of the physicians who attended medical schools or were medical graduates necessarily involves a search of the roster of the various medical schools extant at that time.

Transylvania Medical School at Lexington, Kentucky, founded in 1799, and the Ohio Medical College at Cincinnati, organized in 1818, have been visited and studied. The influence of both of these schools through their Indiana graduates exerted a profound influence upon the practice of medicine, the development of medical organizations, and medical education.

At the suggestion of the Bureau of Publicity, an attempt is being made to collect photographs of all of the past presidents of the Indiana State Medical Association. These photographs, of which a goodly number have already been secured, are being rephotographed and will be made to conform to a uniform size. Subsequently the pertinent information concerning the life of each president is to be obtained. The pictures are to be labeled, framed and presented at the next session of the Indiana State Medical Association meeting in October. The pictures will eventually find a permanent home in the offices of the Indiana State Medical Association, to grace "the walls of that Hall of Fame."

There are two suggestions I have to make which I believe would be of considerable assistance, namely, that the President, immediately upon election, should send a photograph of himself with a history of his career to the Historian of the Society, thus facilitating the collection of current information. The necessity for establishing such a regime is only too apparent when an attempt is made to obtain photographs and data regarding the earlier presidents. The second suggestion concerns the proposition that a certain amount of space be set aside in the *Journal of the Indiana State Medical Association*, say not to exceed one page each month, where information of a historical nature pertaining to Indiana may be published, and through which, also, requests for material may be made.

Respectfully submitted,

L. G. ZERFAS, M. D., Historian.

#### REPORT OF COMMITTEE ON CODIFICATION OF CONSTITUTION AND BY-LAWS

The report of this committee was published in the September 1934 issue of THE JOURNAL, pages 413 to 424, inclusive.

#### DELEGATES AND ALTERNATES TO THE HOUSE OF DELEGATES AT THE INDIANAPOLIS SESSION

County	Delegates	Alternates			
Adams	Palmer Eicher	Myron Habegger	Gibson	C. M. Clark	Virgil McCarty
Allen	S. P. Hoffman	W. W. Duemling	Grant	V. V. Cameron	B. C. Dale
	M. R. Lohman	E. R. Carlo	Greene	George Moses	King L. Hull
	W. C. Wright	D. W. Schafer	Hamilton	S. W. Hooke	J. W. Griffith
Bartholomew	M. C. McKain		Hancock		
Benton			Harrison	W. E. Amy	
Boone	E. A. Rainey	C. G. Kern	Hendricks		
Carroll	J. R. McLaughlin	Hubert Gros	Henry	George W. Stout	W. U. Kennedy
Cass	George Miller		Howard	O. D. Hutto	P. W. Ferry
Clark	Wm. M. Varble	H. H. Reeder	Huntington	Robert D. Meiser	J. M. Hicks
Clay	H. M. Pell	Fred C. Dilley	Jackson	C. H. Ruch	C. E. Gillespie
Clinton	M. F. Boulden	John S. Ketcham	Jasper-Newton	A. R. Kresler	C. W. Mathews
Crawford			Jay	B. M. Taylor	G. V. Cring
Daviess-Martin			Jefferson	George A. May	Anna Goss
Dearborn-Ohio	E. L. Libbert		Jennings	J. H. Green	W. L. Grossman
Decatur	W. E. Thomas	H. S. McKee	Johnson	W. L. Portteus	R. C. Wilson
Dekalb			Knox		
Delaware-Blackford	I. N. Trent		Kosciusko	C. N. Howard	
Dubois			Lagrange		
Elkhart	A. C. Yoder	D. D. Todd	Lake		
Fayette-Franklin	L. Neff Ashworth		Laporte	J. R. Pugh	H. W. Eggers
Floyd	P. H. Schoen	Wm. Winstandley	Lawrence	J. M. White	B. F. Gumbiner
Fountain-Warren	S'meon Lambricht	A. L. Spinning	Madison	C. R. Pettibone	F. A. Gutierrez
Fulton			Marion	G. L. Verplank	T. W. Oberlin
				Jon Kelly	
				J. D. Byrns	Walter Sherwood
				G. B. Metcalf	S. W. Litzenger
				R. C. Beeler	Karl R. Ruddell
				J. W. Carmack	Wm. E. Gabe
				C. A. Stayton	H. L. Foreman
				W. F. Kelly	Elmer Funkhouser
				C. J. Clark	Harry J. Weil
				E. O. Asher	J. M. Whitehead
				Max A. Bahr	H. K. Langdon
				O. W. Sicks	L. G. Zerfas
				H. G. Morgan	
				R. L. Lochry	
				T. C. Eley	
			Marshall	C. F. Randal	P. B. Carter
			Miami	F. H. Austin	
			Monroe	T. Z. Ball	
			Montgomery	E. M. Pitkin	H. H. Dutton
			Morgan	C. E. Munk	J. R. Nash
			Noble	George Dillinger	S. T. Teaford
			Orange		
			Owen		
			Parke-Vermillion	F. G. Green	I. D. White
			Perry	D. S. Conner	N. A. James
			Pike		
			Porter	C. H. DeWitt	W. M. Parkinson
			Posey	Wm. B. Challman	Paul Boren
			Pulaski	C. E. Linton	
			Putnam	L. W. Veach	V. E. Wiseman
			Randolph	L. W. Painter	Russell Engle
			Ripley	R. Lee Smith	M. Joseph Coomes
			Rush	C. C. Atkins	Roy E. Shanks
			St. Joseph	A. S. Giordano	H. D. Pyle
				M. D. Wygant	G. M. Rosenheimer
				P. J. Birmingham	J. A. Abel
			Scott	M. L. McClain	
			Shelby		
			Spencer		
			Steuben	S. S. Frazier	B. A. Blosser
			Sullivan	J. T. Oliphant	J. H. Crowder
			Switzerland	G. W. Copeland	L. H. Bear
			Tippecanoe	Earl Van Reed	O. R. McCay
				G. A. Thomas	R. R. Calvert
				J. H. Warne	S. M. Cotton
			Tipton	Herman M. Baker	
			Vanderburgh	L. E. Fritsch	
				O. R. Spigler	C. S. Carmicheal
			Vigo	C. L. Luckett	A. W. Cavins
				O. G. Brubaker	
			Wabash		
			Warrick		
			Washington	Claude B. Paynter	W. L. Green
			Wayne-Union	Will Thompson	M. F. Johnston
			Wells	D. C. Wybourn	H. D. Caylor
			White		
			Whitley	Paul Garber	Benjamin Pence



# LIST OF PRESIDENTS OF THE INDIANA STATE MEDICAL ASSOCIATION SINCE ITS ORGANIZATION

<i>Name and Residence</i>	<i>Elected</i>	<i>Served</i>
Livingston Dunlap, Indianapolis.....	1849	1849
William T. S. Cornett, Versailles.....	1849	1850
Asahel Clapp, New Albany.....	1850	1851
George W. Mears, Indianapolis.....	1851	1852
Jeremiah H. Brower, Lawrenceburg.....	1852	1853
Elizur H. Deming, Lafayette.....	1853	1854
Madison J. Bray, Evansville.....	1854	1855
William Lomax, Marion.....	1855	1856
Daniel Meeker, LaPorte.....	1856	1857
Talbott Bullard, Indianapolis.....	1857	1858
Nathan Johnson, Cambridge City.....	1858	1859
David Hutchinson, Mooresville.....	1859	1860
Benjamin S. Woodworth, Fort Wayne.....	1860	1861
Theophilus Parvin, Indianapolis.....	1861	1862
James F. Hibberd, Richmond.....	1862	1863
John Sloan, New Albany.....	1863	1864
John Moffet (acting), Rushville.....	1864	1864
Samuel M. Linton, Columbus.....	1864	1864
Myron H. Harding, Lawrenceburg.....	1865	1865
Wilson Lockhart (acting) Danville.....	1865	1866
Vierling Kersey, Richmond.....	1866	1867
John S. Bobbs, Indianapolis.....	1867	1868
Nathaniel Field, Jeffersonville.....	1868	1869
George Sutton, Aurora.....	1869	1870
Robert N. Todd, Indianapolis.....	1870	1871
Henry P. Ayres, Fort Wayne.....	1871	1872
Joel Pennington, Milton.....	1872	1873
Isaac Casselberry, Evansville.....	1873	1874
Wilson Hobbs, Knightstown.....	1873	1874
Richard E. Haughton, Richmond.....	1874	1875
John H. Helm, Peru.....	1875	1876
Samuel S. Boyd, Dublin.....	1876	1877
Luther D. Waterman, Indianapolis.....	1877	1878
Louis Humphreys, South Bend.....	1878	....
Benj. Newland (acting) Bedford (v.-p.).....	1878	1879
Jacob R. Weist, Richmond.....	1879	1880
Thomas B. Harvey, Indianapolis.....	1880	1881
Marshall Sexton, Rushville.....	1881	1882
William H. Bell, Logansport.....	1882	1883
Samuel E. Munford, Princeton.....	1883	1884
James H. Woodburn, Indianapolis.....	1884	1885
James S. Gregg, Fort Wayne.....	1885	1886
General W. H. Kemper, Muncie.....	1886	1887
Samuel H. Charlton, Seymour.....	1887	1888
William H. Wishard, Indianapolis.....	1888	1889
James D. Gaich, Lawrenceburg.....	1889	1890
Gonsolvo C. Smythe, Greencastle.....	1890	1891
Edwin Walker, Evansville.....	1891	1892
George F. Beasley, Lafayette.....	1892	1893
Charles A. Daugherty, South Bend.....	1893	1894
Elijah S. Elder, Indianapolis.....	1894	1895
Charles S. Bond (acting), Richmond.....	1894	1895
Miles F. Porter, Fort Wayne.....	1895	1896
James H. Ford, Wabash.....	1896	1897
William N. Wishard, Indianapolis.....	1897	1898
John C. Sexton, Rushville.....	1898	1899
Walker Schell, Terre Haute.....	1899	1900
George W. McCaskey, Fort Wayne.....	1900	1901
Alembert W. Brayton, Indianapolis.....	1901	1902
John B. Berteling, South Bend.....	1902	1903
Jonas Stewart, Anderson.....	1903	1904
George T. MacCoy, Columbus.....	1904	1905
George H. Grant, Richmond.....	1905	1906
George J. Cook, Indianapolis.....	1906	1907
David C. Peyton, Jeffersonville.....	1907	1908
George D. Kahlo, French Lick.....	1908	1909
Thomas C. Kennedy, Shelbyville.....	1909	1910
Frederic C. Heath, Indianapolis.....	1910	1911
William F. Howat, Hammond.....	1911	1912
A. C. Kimberlin, Indianapolis.....	1912	1913
John P. Salb, Jasper.....	1913	1914
Frank B. Wynn, Indianapolis.....	1914	1915

George F. Keiper, Lafayette.....	1915	1916
John H. Oliver, Indianapolis.....	1916	1917
Joseph Rilus Eastman, Indianapolis.....	1917	1918
William H. Stemm, North Vernon.....	1918	1919
Charles H. McCully, Logansport.....	1919	1920
David Ross, Indianapolis.....	1920	1921
William R. Davidson, Evansville.....	1921	1922
Charles H. Good, Huntington.....	1922	1923
Samuel E. Earp, Indianapolis.....	1923	1924
E. M. Shanklin, Hammond.....	1924	1925
C. N. Combs, Terre Haute.....	1925	1926
Frank W. Cregor, Indianapolis.....	1926	1927
George R. Daniels, Marion.....	1927	1928
Charles E. Gillespie, Seymour.....	1928	1929
Angus C. McDonald, Warsaw.....	1929	1930
Alois B. Graham, Indianapolis.....	1930	1931
Franklin Smith Crockett, Lafayette.....	1931	1932
Joseph H. Weinstein, Terre Haute.....	1932	1933
Everett E. Padgett, Indianapolis.....	1933	1934

## EXHIBITORS 1934 SESSION

### INDIANAPOLIS

#### Booth No.

1	Mead Johnson and Co....	Evansville, Ind.
2	Abbott Laboratories .....	Chicago
3	American Hospital Supply Corp...	Chicago
4	S. M. A. Corporation.....	Cleveland, Ohio
5-6	Akron Surgical House.....	Indianapolis
7	W. H. Armstrong Co.....	Indianapolis
8	R. B. Davis Co.....	Hoboken, N. J.
9	Stokely Brothers .....	Indianapolis
10	Kellogg Company.....	Battle Creek, Mich.
11	Mercck and Company.....	Rahway, N. J.
12	Mellin's Food Company.....	Boston, Mass.
13	Max Woche & Son Co....	Cincinnati, Ohio
14	W. B. Saunders Co.....	Philadelphia, Pa.
15	Bilhuber-Knoll Corp....	Jersey City, N. J.
16-17	Pitman-Moore Company..	Indianapolis, Ind.
18	Medical Protective Company.....	.....Wheaton, Ill.
19	A. S. Aloe Company.....	St. Louis, Mo.
20	Petrolagar Laboratories.....	Chicago, Ill.
21	Gerber's Products.....	Fremont, Mich.

### Booth No. 1—Mead Johnson and Company Evansville

Mead Johnson and Company will have on exhibit its complete line of infant diet materials including Dextri-Maltose, Mead's Newfoundland Cod Liver Oil, Mead's Viosterol in Oil, 250 D, Mead's 10 D Cod Liver Oil, Mead's Viosterol in Halibut Liver Oil, 250 D (liquid and Capsules), Mead's Halibut Liver Oil, Mead's Brewers Yeast Powder, Mead's Brewer Yeast Tablets, Pablum, Mead's Cereal, Sobee, Mead's Powdered Protein Milk, Mead's Powdered Lactic Acid Milk, Powdered Whole Milk, Alacta, Reolac and Casee.

There will also be for the examination of physicians a complete line of Mead's Services such as "Diets for Older Children," height and weight charts, feeding formulae, etc., all of which are free to members of the medical profession in any quantity desired.

Representatives will be on hand to meet their old friends and to discuss the application of any of the Mead Products to infant feeding problems.

**Booth No. 2—Abbott Laboratories****Chicago**

A sincere invitation is extended to you to call at the Abbott Laboratories booth where the Abbott line of nutritional products, including Haliver Oil preparations, will be featured.

Members of the Abbott scientific staff will welcome an opportunity to discuss with you the most recent results of research not only in the field of vitamins, but also along the other lines in which Abbott Laboratories specialize.

**Booth No. 3—American Hospital Supply****Corporation, Chicago**

In Booth No. 3 will be found a complete display of the popular Baxter's Intravenous Solutions in Vaeoliters. More than 2500 hospitals have used in excess of one million liters of these solutions, according to information furnished by the distributor, American Hospital Supply Corporation, Chicago, New York, Pittsburgh.

Another feature of the American Hospital Supply exhibit will be the new OXYGENAIRE for 1934-35, a motorless oxygen therapy unit in widespread use in hospitals in the entire United States.

**Booth No. 4—S. M. A. Corporation****Cleveland**

Crystalline carotene, so rare in 1930 that only a few men in the whole world had seen it, will be displayed by S. M. A. Corporation at Booth No. 4.

For administering Pro-Vitamin A alone, Smaco Carotene-in-Oil will be featured. This is a solution of carotene, the plant source of all Vitamin A activity. It has no fishy taste.

For Vitamin A and D effect, together, Smaco Carotene-with-Vitamin-D-Concentrate-in-Oil will be shown. For those who prefer Cod Liver Oil, Smaco Carotene-and-Vitamin-D-Concentrate-in-Cod-Liver-Oil is offered. The Smaco line also includes Smaco Vitamin-D-Concentrate-in-Oil.

S. M. A. Corporation will also display S. M. A., the anti-rachitic and antispasmodic breast milk adaptation, powdered Hypo-Allergic Milk for milk-sensitive persons, and Alerdex, the protein-free maltose and dextrins.

**Booths 5 and 6—Akron Surgical House, Inc.****Indianapolis**

Spaces Nos. 5 and 6 have been taken by the Akron Surgical House, Inc., for the Indiana State Medical Association meeting. Mr. Marshall and Mr. Clark will be in charge and invite all attending the meeting to make this their headquarters.

**Booth No. 7—William H. Armstrong Company****Indianapolis**

The William H. Armstrong Company will occupy booth No. 7 with a general display of equipment and supplies for physicians and hospitals, including instruments, furniture, laboratory equipment, etc. Mr. K. E. Hoy will be in charge of the Armstrong booth.

**Booth No. 8—R. B. Davis Company****Hoboken, New Jersey**

New Food Value Charts (calcium, phosphorus, Vitamin D and caloric value) will be available for those who desire same at the booth of the R. B. Davis Company. Visit Booth No. 8 and be served with Cocomalt. This popular food drink supplies rich calcium, phosphorus, Vitamin D content in a particularly delicious form. The Cocomalt booth will be in charge of Mr. George Dowding.

**Booth No. 9—Stokely Brothers and Company****Indianapolis**

Stokely Brothers & Company of Indianapolis, for thirty-six years growers and canners of vegetables, will introduce a new member of their family—Strained Foods for Baby and Smooth Diets—to the attendants of the convention. Every step in the preparation of these better foods are Laboratory controlled from the moment the crisp garden fresh vegetables and fruits go into the shiny glass lined kettles until they are sealed in special golden enamel lined cans. The natural flavor, valuable vitamins and mineral salts of the fresh produce are retained in high degree. Visit Booth No. 9 and see why these foods are more tempting to Baby.

Mr. J. T. Field, sales manager for Stokely's, will be in charge of the booth.

**Booth No. 10—Kellogg Company****Battle Creek, Michigan**

Interesting bottle displays at the Kellogg Booth, No. 10, show the amount of combined minerals and of iron alone which are found in Kellogg's All-Bran. Reprints of papers reporting recent research on bran are available. Visiting physicians will be interested, too, in a display of the amount of caffeine which is removed from coffee beans to make one pound of Kellogg's Kaffee Hag Coffee (97% caffeine free), and of the amount of caffeine ordinarily present in one cup of coffee. Kaffee Hag Coffee will be served at the booth.

Winifred B. Loggans, of the Home Economics Department, will be in charge.

**Booth No. 11—Merck & Co., Inc.****Rahway, New Jersey**

The preparations that will be exhibited by Merck & Co. Inc., in Booth 11, are all of a scientific nature, and the representatives in attendance will be prepared to give detailed information regarding them. Among the better known products will be Tryparsamide, Stovarsol, Neoarsphenamine, Digitan, Erythrol Tetranitrate, Pyridium and Optochin Hydrochloride.

The well known reference book, "The Merck Manual," has been entirely rewritten, and the 6th edition will have its first showing.

**Booth No. 12—Mellin's Food Company****Boston**

The adjustment of the diet for babies deprived of human milk must always be of interest to physicians, and the purpose of the Mellin's Food Company in taking part in the technical exhibit is to set before physicians the basic principles of Mellin's Food, with the sincere belief that the evidence accumulated from long experience fully justifies the recognition of the value of Mellin's Food as a modifier of milk in infant feeding. Physicians are cordially invited to visit Booth 12.

Mr. Boyd Thomas and Mr. George W. Sweney will be in charge of the booth.



### Booth No. 13—Max Woehner and Son Company Cincinnati

For 96 years, the Max Woehner & Son Company, surgical instrument and orthopaedic appliance specialists, have served the profession of Indiana. They will show some new goods among which they enumerate the aluminum Regulator for administering the Elliott Treatment. Hospitals and clinics that have used the Regulators are buying additional outfits, the treatments proving most successful.

They will also show Artificial Fever Outfits, new Bi-Valve Transfusion Methods and new Tourniquets as well as other high-grade surgical instruments.

They will be able to show many interesting items to the attending profession.

### Booth No. 14—W. B. Saunders Company Philadelphia

These publishers will exhibit their complete list of 300 or more titles. Of particular interest, because of their immediate newness and clinical character, will be a brand new rewritten edition of Maximow and Bloom's "Histology," a brand new edition of Arey's "Developmental Anatomy," Curtis' three volume "Obstetrics and Gynecology," third edition of Cecil's "Medicine," new (2nd) edition of Beckman's "Treatment," Bickham's magnificent "Operative Surgery" in 7 volumes, Callender's "Surgical Anatomy," the current Mayo Clinic Volume, Griffith and Mitchell's one-volume "Pediatrics," remade edition of Stokes' "Clinical Syphilology," Noyes new book on "Clinical Psychiatry," Buck's "Essentials of Physical Diagnosis," Pepper & Farley's "Blood Diagnosis," Norris & Landi's "Diagnosis of Chest Diseases" in a fifth edition, and advance sheets of a number of books in active preparation for publication this fall.

### Booth No. 15—Bilhuber-Knoll Corporation Jersey City, New Jersey

Bilhuber-Knoll Corp., Jersey City, N. J., will exhibit a complete line of their fine medicinal chemicals at Booth No. 15.

Included among the "Council accepted" therapeutic agents on display will be the morphine derivative, Dilaudid, which possesses many advantages over morphine and other opiates for the relief of pain and cough. Also the diuretic and myocardial stimulant, Theocaine; Metrazol, the respiratory and circulatory stimulant, as well as Lenigallol. Likewise Euresol Procapillis which has received considerable attention for the treatment of scalp and skin.

Other products worthy of attention are the well tolerated theophylline salt, Phylliein; Bromural, sedative and hypnotic; also the calcium-phosphorus compound, Calciphos.

A visit to their booth will prove interesting and instructive and all physicians present at the meeting of the Indiana State Medical Association are cordially invited to study the products exhibited. Representatives in attendance will be pleased to render every possible courtesy.

Mr. A. S. Moore and Mr. T. A. Nooner will be in charge of the booth.

### Booths 16 and 17—Pitman-Moore Company Indianapolis

During the annual meeting of the Indiana State Medical Association, the exhibit of Pitman-Moore Company will occupy spaces 16 and 17 on the mezzanine floor of the Claypool Hotel. The exhibit will be located near the head of the stairs leading

from the lobby to the floor on which the Convention Hall is located. This firm will exhibit a number of their leading Specialties and their line of Biological products, including the new Antiviruses. Mr. F. V. Hawkins and Mr. W. B. Matthews will be in charge, and a number of the firm's Indiana representatives will be in attendance.

### Booth No. 18—Medical Protective Company Wheaton, Ill.

The Professional Liability risk of the doctor cannot be given an underwriting classification with any other type or types of insurable hazards, without disadvantage to the doctor. The circumstances out of which arise the reciprocal rights and duties of a doctor and his patient are peculiar to their relationship; the interest of the doctor in the management and disposal of charges of negligence against him is not to be compared to that of any other class of damage suit defendants. The most exacting requirements of adequate liability protection are those of the Professional Liability field.

The Medical Protective Company is exclusively engaged in that field.

Our representatives, thoroughly trained in Professional Liability underwriting, invite you to confer with them at Exhibit Booth No. 18. Examine there the current issue of "The Doctor and the Law," the periodical which is published by the Law Department of The Medical Protective Company for its contract holders and which is devoted exclusively to a discussion of law affecting the practice of medicine.

### Booth No. 19—A. S. Aloe Company St. Louis

Space No. 19 will house the exhibit of the A. S. Aloe Co., and will be under the charge of Mr. Oldfather and Mr. Curtis, who as Aloe representatives have served Indiana doctors for many years.

The Aloe space promises to be of a great deal of interest since in addition to a general exhibit of surgical instruments and supplies there will be on display the famous Dr. Charles Robert Elliott Treatment Machine, which has secured nationwide attention in the treatment of pelvic and prostatic inflammation. There will also be a showing of Stille-Scanlan rustless instruments at a special discount.

### Booth No. 20—Petrolagar Laboratories Chicago

Each tablespoonful of this new type of Petrolagar contains the physiological equivalent of the U.S.P. dose (2 c.c.) Fluid-extract Casearia Sagrada U.S.P. There is a sample of Petrolagar with Casearia for every visitor at the Petrolagar Exhibit.

### Booth No. 21—Gerber Products Fremont, Mich.

Visitors at the Gerber Products Booth No. 21 will be shown the Gerber's Strained Cereal, Vegetables, and Prunes and given any information desired concerning the special process used in the manufacture of these products.

Booklets are available. One on infant feeding is intended for distribution by physicians to mothers and contains help on the technique of feeding without giving definite feeding directions. There are several publications on the use of these products in therapeutic diets, some for professional use only and others for general distribution.

# THE JOURNAL

OF THE

## INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL  
PROFESSION OF INDIANA

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OCTOBER, 1934

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### EDITORIALS

#### OUR PRESIDENT

EVERETT ERWIN PADGETT, M. D., was born at Carlisle, Indiana, December 13, 1878, the son of James H. and Martha Yates Padgett.

He received his early education in the Sullivan County schools, Vincennes University, and Indiana State Normal School in Terre Haute. Later he attended Chicago University and Rush Medical College, receiving therefrom his medical degree in 1905. During his medical course he became a member of the Alpha Kappa Kappa fraternity.

After his internship, he located in Indianapolis where he was engaged in general practice for nine years, then limited his practice to surgery. He became a member of the Indianapolis Medical Society soon after engaging in his profession, is a member of the American Medical Association and of the American College of Surgeons. Associating himself with the medical department of Indiana University, several years ago, he now holds the position of assistant professor of surgery in that institution, and conducts a teaching clinic in surgery at the Indianapolis City Hospital.

In 1905 Dr. Padgett married Miss Teresa Bough, of Pleasantville, Indiana. They have one son, Palmer Findley Padgett.

In the Indiana State Medical Association Dr. Padgett first became officially active as councilor for the Seventh District, and later was made chairman of the Council. He served for several years in the House of Delegates.

"Padgett," as he is commonly known to his intimates, assumed his office as president in a rather trying time; the depression was still on and going good; county and district societies were demanding unusual attentions from our official family, all of

which demands were promptly met. Added to this is the fact that his immediate predecessors in the office had set a record-breaking pace; they had covered the state as it had never been covered before; they had put an unusual amount of pep and ginger into the Association, so much so that Indiana became generally known as an up-and-going state in affairs of medicine. Not the least daunted, Padgett swung into action and has made a most enviable record; he has been "everywhere," has made innumerable addresses of much merit and, in short, has carried on as the head of a great body of medical men should do.

With the close of his term Dr. Padgett can look back on the accomplishments of 1934 with a sense of personal pride in the fact that he had much to do with it all. The year 1934 presented us with many grave problems, most of which were met and solved, thanks to Our President.

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#### ENCEPHALITIS IN INDIANA

During the past few weeks there has been a very considerable increase in the number of reported cases of encephalitis in the state. Rumor has it that there are a great many other cases that are not being reported. At the middle of the month of September, there had been approximately twenty-five deaths. The communities affected are widely scattered, though most of them have been in the southern two-thirds of the state. If we may judge by other epidemics of this disease, and in particular by the St. Louis epidemic of last year, the number of cases will increase until cool or cold weather comes and will then rather rapidly subside. It is not unlikely that we may be facing a rather severe experience, and for that reason the profession should inform itself concerning this very important disease. Attention is called to the symposium on the subject that was published in the *Journal of the American Medical Association* in the issues of September ninth and sixteenth. The article by Hempleman concerning diagnosis is of especial value.

The medical and health authorities of the world frankly admit that there is all too little that can be done to ameliorate or prevent either the disease in a given patient, or the progress of the epidemic in a population. The causative agent is known to be a filterable virus, but that is about all. We cannot see it with the microscope, nor can we culture it save by inoculation into susceptible animals. It is supposed that it is spread by means of the secretions of the mouth and nose, and that it enters the system through the mucous membranes of the nose. Infection by means of food, water, and milk has apparently been ruled out, as has transmission by the bites of insects. It is not very infectious and rarely is more than one case seen in a given household. Healthy persons are believed to be carriers of the virus, and for that reason it is usually



impossible to trace the disease from one patient to the next.

It is hoped that the various medical societies will arrange programs on the subject early in the coming year, and that the members will thoroughly acquaint themselves with the symptoms and treatment of the disease. Any publicity that goes out should come from the medical society or a committee appointed by the society for that purpose. Unless this is done, there is sure to be a great deal of contradiction and the public will be alarmed and distracted unnecessarily. Diseases of this sort are particularly likely to cause hysteria and uneasiness. It is to be hoped that no such debacle as was witnessed in Indianapolis at the time of the meningitis epidemic will be experienced. Quack or proprietary remedies, sprays, gargles, and antiseptics must not be exploited because they can do no possible good, and may do harm by irritating the mucous membrane and thereby possibly opening the gate to invasion by the virus.

Treatment for this infection is symptomatic and expectant. Spinal drainage usually gives prompt relief, but pressure accumulates again and it may be necessary to drain as often as two or three times a day. It is believed that patients who have had frequent drainage have a much better prognosis as to recovery and as to freedom from sequelae. Convalescent serum has been used with varied results, but the value of this serum is doubted. Glucose and salicylates by the intravenous route are recommended. The patient should be protected from every sort of disturbance and should have various symptoms relieved as they may appear. When possible, the cases should be hospitalized and in any case strictly isolated. Funerals should be private. Contacts should be quarantined when possible for at least two weeks after exposure. In the St. Louis epidemic the mortality was somewhat less than 20%. Older persons are much more likely to take the disease and show a much higher case mortality than do children and younger people. There will undoubtedly be a considerable number of patients who will be left more or less crippled, though the St. Louis epidemic showed a much smaller percentage of residues than have previous epidemics of encephalitis. When the patient has apparently recovered, the physician should give a rather guarded prognosis for the future, inasmuch as it is likely that some after-effects will develop after some time has passed.

This is a time and a circumstance in which the medical profession and health departments must stick together to the end that there be no needless flurry and agitation. The public should be reassured by being told that a very small part of the population will be involved (almost certainly not more than 0.1%, or one in a thousand), that the great majority of those will recover without residue, and that as cooler weather comes the epidemic will wane. Every sick person should be seen by a physician, and diagnosed and treated. All

genuine cases should be reported, but it is extremely important that we not be calling every headache an "encephalitis."

### THE PLAYFUL ASS—By Aesop

An ass climbed up to the roof of a building and, frisking about there, broke in the tiling. The owner went up after him and quickly drove him down, beating him severely with a thick wooden cudgel. The ass said, "Why, I saw the monkey do this very thing yesterday, and you all laughed heartily, as if it afforded you very great amusement."

Those who do not know their right place must be taught it.

—Aesop's Fables.

Therein resides a moral, a lesson, and a guide to continued future action for organized medicine in Indiana. We dare not relent.

Still fresh in our memories are the monkey activities of a small group of misguided M.D.s and uninformed Ph.D.s, when, backed by five million idle dollars seeking notoriety, they published their illusionary book, *The Cost of Medical Care*. This proposed guinea-pig experiment in regimenting and socializing the practice of medicine failed ingloriously. Manifestly not for the public weal and contrary to long-established ethical principles, the profession presented an almost united front in opposition. In this, Hoosier Medicine played a prominent part.

Even more recently, last June, a small coterie or bloc of Men in White, members of the American College of Surgeons, exploding prematurely in over-distended egoism and unwarranted importance, broadcast an abortive attempt to fasten upon us the many-armed octopus of medical insurance. The repercussions still are rumbling. Ninety-eight Indiana members of the College have signed a round-robin protest. Other sections are being heard from. With Lexington and Concord in mind, the rank and file of the profession are on the alert, endeavoring to avoid surprise from within or without.

Our own Indiana State Board of Medical Registration and Examination has taken a forward step in ruling that the administering of an anesthetic is in deed and in fact the practice of medicine, thus correcting an infringement and restoring to the profession their property rights as guaranteed by the Constitution of the United States. The Attorney General has confirmed this decision. Too long have we been educating lay persons to carry on duties which rightly belong to and should be performed by those who have an especially emphasized training in medicine. The above principle of property rights often is involved in the fields of public health, tuberculosis, physiotherapy, roentgenology, pathology, and, perhaps, in corporate and hospital practice.

Last November we elected to represent us in our State Legislature a body of men in whom we reposed our trust for constructive legislation to bring order out of chaos. The record is open before us. Too many could not say, "no." Too many performed experimental monkey-shines on the roof, dislodg-

ing the protective tiling, and thus exposing their constituents to the ravages of a downpouring rain of leftist experiments. The Hoosier medical profession must exert its nonpartisan utmost next month to correct this situation. We must strengthen every beam and support of our professional fabric, otherwise it will not be said of us: "And the rain descended, and the floods came, and the winds blew, and beat upon that house; and it fell not, for it was founded upon a rock."

All of which would be sad.

### A CANADIAN SAGA

A few months ago the interest of the medical profession, as well as that of a great portion of the lay reading public, was aroused by the announcement that quintuplets had been born to a Canadian couple. It was an event that is recorded but few times in obstetrical history. Interest became more and more acute as the days passed, and the babies continued to thrive, for in no other recorded instance had all the babies lived for more than a few days.

Daily the public press recorded the doings of the Dionne family, with occasional references to the attending physician, Allan Roy Dafeo, of Calander, Ontario. While our interest in the "quints" was that of most everyone else, we could not help wondering just what manner of man this physician might be; just how he managed so quickly to adjust himself to an extraordinary situation; how, with the limited equipment available, he took care of these little prematures. Thus it was with no little anticipation that we awaited his own story which was published<sup>1</sup> recently. We have been reading case histories for many years; we have read a few that struck our fancy as being somewhat of the classical variety, but in the present instance we were astounded at the intimate style in which Dr. Dafeo told his story. A man of some fifty-one years, and a practitioner of medicine since 1907, he presents a case history that should be read by every physician in or out of practice; it supplies food for much reflection and from it we have learned much.

Here was a stage, completely set, for publicity of a sort that seldom comes to an individual. In fact, we know of but one comparable instance—that of Colonel Lindbergh following his solo flight to Paris. Dr. Dafeo, in a quaint, not to say naive manner, discusses the background of these Normans, these French-speaking neighbors of ours to the north. He cites the fact that his field of practice covers some four hundred square miles of territory having a population of less than four thousand. He does not neglect to refer to the hardships these folks undergo; they, too, have been hit by the economic upset of the past few years. However, contraception is unknown in the community, and families of fifteen to twenty children are not un-

common. The Dionnes, a young couple, already had five children before the advent of the quintuplets.

Going into the history of the case, the doctor graphically describes a very clear picture of an expectant young mother, a very sick woman, with swollen hands, arms, feet and legs, and with blurred vision. Sixteen days after he first was consulted he received a "hurry call" and arrived at the home to find that two babies were already born, and a third was on the perineum. Little or no preparation had been made for the accouchement, other than a teakettle of boiling water on the stove.

The third, fourth, and fifth babies delivered, Dr. Dafeo found the mother in a desperate condition. She became worse and, fearing immediate dissolution, he himself went for the parish priest, for the babies' father had disappeared. When the physician returned, he found the mother much improved and the babies still alive.

The resourcefulness of this country practitioner is shown in the makeshift manner in which he looked after the mother and her five babies until such time as proper equipment and help could be obtained. As might be expected, the care of the infants involved much time and attention; he was called at all hours, whenever an emergency arose. So the story goes, for some two months, with the notation that at the end of that period all the babies are doing well. Ere now they have been removed to a small hospital especially erected for them, where they receive attention such as is seldom accorded the newborn.

In his comment at the conclusion of the report, Dr. Dafeo stresses the fact that "the publicity in connection with the case has been a serious problem and has caused me considerable trouble and worry; . . . at first I resented what I thought was an intrusion into my private and professional affairs; then I came to realize that I had no right to object to what had become a matter of continent-wide interest."

In the above quotation we found our answer to our query concerning the manner of man this is. Given an opportunity to commercialize, to exploit and to advertise, Dr. Dafeo has thrown aside all such considerations; his sole interest has been the welfare of the mother and babies. He chose to carry on in full accord with the precepts taught by his profession; his recital of the incidents attending this extraordinary event commands the respect of the medical world; his fame is all the greater because of his extreme modesty.

As Morris Fishbein points out, there are other lessons to be learned from this unusual event: "As one gazes upon the picture of the midwife and reads the record of the conditions under which these children were born and developed, one realizes how futile is much of the super-scientific and pseudo-scientific discussion that has been published in recent years on the problems of maternal mortality and infant care. There are many lessons for scientific medicine in this incident."

<sup>1</sup> *Jour. A. M. A.*, September 1, 1934, Vol. 103, No. 9, p. 673.



## EDITORIAL NOTES

The Time: Tuesday, Wednesday and Thursday, October 9, 10 and 11, 1934.

The Place: Indianapolis, Indiana.

The Event: The Annual Session of the Indiana State Medical Association.

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DELEGATES numbering 1,800, without a dissenting voice, endorsed the principles of birth control at a recent convention in Philadelphia of the Young Women's Christian Association.

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WELFARE legislation that will be recommended to forty-four state legislatures meeting within a year was recently outlined in a bulletin issued by the American Public Welfare Association. It is claimed that all public funds should be administered by properly organized public departments.

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SINCE March, 1932, at a cost of \$725,000 to distribute the materials, the National Red Cross has converted 95,000,000 bushels of wheat into 10,688,307 barrels of flour, 4,885 tons of cereal, and 233,901 tons of live-stock feed. More than 800,000 bales of cotton were made into cloth, sheets, garments, blankets, and comforts. The value of the raw material and manufactured materials involved is estimated at \$73,598,452.

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AN EDITORIAL in this issue concerning the November election as it applies to the medical profession should be carefully read by our entire membership. Never in our memory has it been so important that we carefully scrutinize the list of legislative candidates. There is so much of a disturbing element in the air, even in normally placid Indiana, that it behooves us to watch our steps most carefully. It is not that we desire any particular legislation, but we do want to be on the alert lest some fool measure slip through that may vitally affect us. The medical profession already has borne more than its just share of the economic burden; to add to the load is more than we care to contemplate.

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IN spite of reports of deaths caused by the use of the new reducing drugs, dinitrophenol and related compounds, racketeers continue to sell these drugs, and reducing agents containing these drugs have sprung up all over the country. The U. S. Department of Agriculture calls attention to the fact that the Federal Food and Drugs Act has no jurisdiction over products of this type, dangerous though they may be, and all that can be done is to

warn the public that these compounds are dangerous. W. G. Campbell, chief of the Food and Drug Administration, points out that the drugs act by increasing the metabolic rate, resulting in a destruction of the tissues, including fat, to provide fuel for the accelerated metabolism. Poisonous and otherwise harmful effects are more likely to manifest themselves in persons suffering from chronic rheumatism, alcoholism, tuberculosis or diseases of the heart, liver or kidneys.

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### CAMPAIGN FOR ERADICATION OF TUBERCULOSIS IN CHILDREN

Tentative plans for a campaign of education and case finding are being formulated for presentation to the House of Delegates at the annual meeting in Indianapolis. Dr. Torian's Committee on Child Health has been working for several months investigating different methods of attack and will present a program for the consideration of the profession. The Executive Committee of the Indiana State Medical Association is interested in the project and is anxious to do something that will have the effect of cutting down the tuberculosis death rate in young people. The White Plague still is the commonest cause of death in the young people of high school and college age.

It is now pretty generally accepted that the Mantoux test as made with the new testing material P. P. D. (Purified Protein Derivative) is of great value when properly interpreted and followed by x-ray examination when positive. Physicians are recommended to give increased thought to the matter of the earliest possible diagnosis in young people. County medical societies may well consider the need of putting on campaigns of Mantoux testing in the local high schools. It is essential that all incoming freshmen and all children of any grade who are exposed to persons with the disease be tested and checked closely.

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WHEN we hear of the troubles and the lack of cooperation existing between relief directors and medical society officials in some of the states, we cannot help but feel gratified over the cooperation and courtesy that representatives of the Indiana State Medical Association always have received from Mr. Fred Hoke, Mr. William Book and his successor, Mr. Wayne Coy, who have been in charge of relief work in this state. Although our representatives have not always seen eye to eye with these men, we never have failed to obtain a friendly and considerate audience from them, and a frank discussion of complaints, conflicts and irritations has been welcomed. Hence, we are taking this opportunity to express our appreciation to Mr. Book and to wish him success in his new work as executive vice-president of the Indianapolis Chamber of Commerce, and to state that we are looking forward

with pleasure to contacts that we hope to have with Mr. Coy in order that plans may be worked out for the establishment of a medical service to the indigent in Indiana that will be more equitable for both patient and physician.

AT ITS coming annual session the Colorado State Medical Society will vote on the following resolution:

#### GRATUITOUS MEDICAL SERVICES

Section 1. This Society declares that it is a right and a duty of the medical profession to determine for itself what individuals, institutions, and organizations shall have claim upon physicians for gratuitous services.

Section 2. No member of this Society may offer or give to the poor wholly or partially gratuitous medical service, other than in the traditional relationship of physician to private patient, unless the recipient of such service has first been declared eligible thereto by an agency which is engaged in social service investigation and is operating under the general supervision of, and under regulations laid down by, this Society.

Section 3. The provisions of this Chapter shall be construed in harmony with the Principles of Ethics of the American Medical Association, and nothing herein shall be construed as superseding or amending said Principles of Ethics.

Our information is to the effect that the Colorado House of Delegates will unanimously support this very proper piece of legislation. Once in effect we shall watch with no little interest its workings.

UNDER the heading "Medical Men for Things Medical," the following is taken from Mead, Johnson and Company's announcement in the August issue of *Hygeia*:

"The principle that medical men should be the ones to exercise control over medical service is almost axiomatic. Yet there is confusion of thought where there could be straight thinking if all the facts were brought out and faced.

"There are those who would virtually make the physician an employee of the state. They fail to recognize the utter incompatibility between the American political system and the methods of truly professional men.

"There are those who complain about the scarcity of physicians. Yet it is a fact that while England has one doctor for 1,490 persons, France one for 1,690, and Sweden one for 2,890, there is in the United States one physician for every 780 persons.

"There are those who denounce our hospitals on the score of high charges for service, but the truth is that the cost per day of a hospital room with meals and the day and night personal ministrations required by an invalid is usually less than a well person would pay for mere room and meals in a first-class hotel.

"There are those who would like to let down the bars to self-medication. Yet the fact is that during the last few generations the average span of human life has been extended ten years, chiefly through the discoveries of medical science.

"Physicians know these things. They spend years acquiring an education on the care and repair of the most marvelous mechanism on earth—the human body. But they would readily admit that this education does not qualify them for telling railroad executives how to solve transportation problems or impressarios how to stage an opera. The work of the world needs many kinds of specialized knowledge, but certain it is that each field of work will be best managed by those who know it best."

FROM the Vanderburgh County Medical Society *Bulletin* we copy the following editorial entitled, "The Lack of Legal Knowledge in Medical Licensure," which was written by Dr. William R. Davidson:

"For the past several years, the number of doctors moving from state to state has been markedly decreased. Judging from the number of applications from other states, the medical profession, at least, must believe that the depression is over, as in the past few months the number of applications for license by reciprocity has increased greatly.

"It is remarkable that doctors who are contemplating removal do not investigate the conditions of the community where they are contemplating practice. This is noticeably true in cases of the steel counties of the state, as doctors in other states apparently have a high opinion of Indiana, and particularly of the steel country, judging from the number who have stated that they intend to practice in the northwestern part of Indiana.

"Again, doctors are moving into the state without making inquiry as to their qualifications. In a number of cases, they have come into the state and opened an office, contrary to law, without securing a license, and when they do make application, find that they cannot meet the requirements. Physicians generally do not realize that there is no legal right to practice—it is a privilege under the police law, and, consequently, subject to restrictions. Naturally, these restrictions vary in the different states, and it is very essential that a physician who is contemplating removal should investigate not only the conditions in the community but the laws of the state. Considerable loss has been sustained by a number of physicians who have not taken this precaution.

"The various state boards are always ready to furnish full information regarding licensure in their state, and this can be done fully by mail, before the physician has incurred any expense in selecting his office, moving, and establishing himself again. If he would only take this precaution, he would be saved considerable expense, besides a 'ruffled temper.'"



## THE PRESIDENT'S PAGE

### A BIT OF HISTORY

In Kemper's Medical History of Indiana we find the following: "A district medical society was formed in June, 1817, in Vincennes, and at a meeting of the same, in May 1818, delegates were appointed to meet with similar delegates from other district societies and form a State Medical Society. The state society was not formed, however, until 1820 when it met in Corydon, then the Capital of the State. This meeting occurred May 10, and the following officers were elected: President, Vice-President, Secretary, Treasurer, and a Board of Censors composed of three Members." As to program or any other business transactions at this time, the record is silent. This, we believe, was the beginning of what we now proudly call the Indiana State Medical Association, and it was apparently its first official meeting.

### OUR INDIANAPOLIS SESSION

On October 9, 1934, we will hold our 85th annual assembly in Indianapolis. Through these many years our life, though beset with many vicissitudes, has been one of progress. Now with our Association well organized and with approximately three thousand members, we meet for three days of post-graduate study. It is the crowning event of each year medically in our state. I like to think of our annual meeting as a postgraduate course. True it is that we have our social contacts which are well worth while. It is an event at which we meet old friends and make new ones, discuss our various problems, have a good time, and then go home feeling better equipped to take care of our public than we were before this event.

I can assure you that this year will be no exception. The Indianapolis Medical Society has been on its toes all year preparing for this meeting. Its various committees have worked in complete harmony, which will assure each and every one of you a real Hoosier welcome on October 9th.

Too much credit cannot be given to the work of the Committee on Arrangements. This committee, in conjunction with the Woman's Auxiliary, has functioned smoothly and efficiently; the resulting program for your entertainment is complete and we believe that it bids fair to outstrip any given here in previous years.

If we have greater praise for any committee over others, we believe it should be bestowed upon the Committee on Scientific Work, those of our members who shoulder the responsibility of supplying the educational program for you. These men realized their responsibility and have worked untiringly. The results of their labor and devotion are shown in our printed program.

Speakers have been selected with great care so that every physician who attends the meeting will find something of practical value to help in his every-day practice, as well as the inspiration which comes from contact with the masters in our profession. This applies to our men from Indiana as well as to our visitors from outside the state.

We shall also be honored by having the president-elect of the American Medical Association, Dr. James S. McLester, as our principal speaker at the banquet.

### AN OPPORTUNITY FOR YOU

Please remember that you have not taken complete advantage of all your opportunities if you do not spend some time among our scientific exhibits. Here you may learn by observation and study which is, after all, the best way to learn. We are assured that there will be more and better material in this exhibit this year than ever before.

If you are inclined to loosen up and spend a little money, or at least promise to spend it, please allow me to inform you that we have had more demand for commercial exhibit space than we have been able to supply. At least the commercial firms have a strain of optimism, and share with us a hope for real improvement in the near future. Visit their booths; make them know that their presence is a mutual advantage.

### OTHER ORGANIZATIONS WILL MEET

It is largely due to the energy and resourcefulness of our executive secretary that we are able to offer you a feature quite new this year. In fact an effort has been made to make this week somewhat a health week for Indiana. As a result of these efforts, the following associated organizations will meet in Indianapolis, October 8th: Indiana Hospital Association, Indiana Public Health Officers, Child Health District Chairmen, and Hospital Record Librarians and Laboratory Directors. Attendance at any of these meetings is open to any and all members of the Association, and should be helpful to anyone in the practice of medicine.

In brief this is the set-up for your entertainment and benefit at the annual meeting October 8-11, 1934.

In addition our Medical School and the various hospitals extend to you a perpetual invitation. Come as early as you like, stay as long as you will.

We are expecting you, we shall be glad to see you, and will promise not to discuss medical economics if we can avoid it.

*E. E. Padgett.*

## THE EXHIBIT OF THE INDIANA STATE MEDICAL ASSOCIATION AT THE INDIANA STATE FAIR, 1934

RUSSELL SAGE, M. D.,  
CHAIRMAN, STATE FAIR COMMITTEE

The second annual exhibit sponsored by the State Fair Committee of the Indiana State Medical Association consisted of several separate phases of medicine.

Posters and mechanical devices were shown illustrating the dangers and fallacies of various patented cosmetics, and information was given the public concerning the safe and sane use of the same.

Posters, mechanical devices, and information concerning the health of the school child, the importance of annual health examinations, the importance of consulting the family physician on all matters pertaining to health, etc., were displayed. Eye injuries in children were also featured, with posters showing the common causes of such injuries. The usual playthings causing trauma also were shown.

Another feature of the exhibit was a large mechanical device calling the attention of the public to the merits of *Hygeia*, the Health Magazine, published by the American Medical Association. Several hundred copies of the magazine were dispensed free to the public. This part of the exhibit was supplied through the courtesy of the American Medical Association. Mr. Thomas G. Hull, director of the Bureau of Exhibits of the American Medical Association, spent an entire day at the exhibit and gave very valuable advice. We are indebted to Mr. Hull's department for most of our display material.

As an added attraction, free examinations for visual acuity and tests for color blindness were given. A total of 4,442 men, women and children were tested for color blindness. Of this number, 2,079 were males and 2,363 were females. The color blind test used was the one improvised by Professor Ishihara of Tokio, Japan.

Of the 2,079 males tested, 156 or 7.5% were color blind in some degree. Of the 2,363 females tested, only 10 or .423% had impaired color vision.

Of the total 166 individuals examined who showed impaired color vision, 61 or 36.75% were completely red-green blind; 43, or 25.9% were incompletely red-green blind; 25, or 15% were blind to the lighter shades of green; 22, or 13.3% were completely green blind; 8, or 4.86% were completely green blind and incompletely red blind; 3, or 1.85% were incompletely red blind; 2 or 1.2% were completely red blind; 2, or 1.2% were completely red blind and incompletely green blind.

Of the 10 women examined who showed impairment of color vision, 4 were completely red-green blind; 4 were incompletely green blind; and 2 were

incompletely red-green blind. Of these 10 women, 8 were blondes and 2 were brunettes. Only 2 of the 10 knew that they were color blind and these 2 were completely red-green blind. It is of interest to note that 3 of this 10 were sisters who were accompanied by a brother who was also incompletely green blind. There are 4 other girls in this family who were not examined.

Of the total 166 color blind individuals, only 66 or 40% knew that they were color blind. Interesting answers were obtained when these individuals were asked how they found out that they were color blind. If they came from farms, the answer almost invariably was that they could not tell ripe tomatoes or strawberries from green ones, or that they could not see red apples on a green tree. Several found that they were color blind while playing golf, when they soon learned that it was much cheaper for them to buy yellow tees. Still others discovered their condition when taking examinations for employment which necessitated an accurate color vision such as the army, navy, railroad and telephone companies, etc. In this connection two interesting tales were told. One person, completely red-green blind, stated that he knew that he was color blind, that he was a railroad engineer and had been one for thirty years and never had missed a block. Another, who was also completely red-green blind, stated that his brother was more blind than he and that the brother was captain of a signal corps in the navy.

Of the total number of color blind individuals all drove automobiles if they were old enough to do so. Only 22 of the 166 confessed to any trouble with the stop lights, although a large number stated that they could not tell the difference until they got much closer to the lights than was necessary for other members of the family. Still others stated that they had a little trouble with traffic lights at twilight or when they came upon them before they changed. Two stated that they could not tell the difference at all, and drove their cars either by the "stop" and "go" lettering on the signs or by observing the other traffic. Only a few of the 166 had any trouble differentiating between the pure filtered colors red, green and blue.

Of the color blind individuals, 80 had dark hair and 86 had light hair. It was observed that there was a high incidence of color blindness among the red-haired, but the number of normal red-haired persons was not taken, and no exact statistics can be given on this point.

Only 24 of the 166 knew of any of their relatives who were color blind.



Visual acuity tests run on the color blind individuals revealed that there was no correlation between their impaired color vision and their visual acuity.

Visual acuity tests run on 232 males with normal color vision showed that 116, or 50%, had normal vision in both eyes. (Normal vision was considered 20-20.) Sixty-six, or 28.45%, had impaired vision in both eyes, and 50, or 21.5%, had normal vision in one eye and impaired vision in the other.

Visual acuity tests run on 139 females with normal color vision showed that 59, or 42.4%, had normal vision in both eyes; 51, or 36.7%, had impaired vision in both eyes; and 29, or 21.3%, had normal vision in one eye and impaired vision in the other.

Visual acuity and color blind tests were run on 11 deaf and dumb individuals, none of whom were color blind. There was no correlation between their deaf and dumb state and their visual acuity.

Visual acuity and color blind tests run on five true albinos revealed one that was completely red-green blind and in each of these five there was a marked impairment of visual acuity.

#### COMMENT

These statistics on color blindness are subject to considerable criticism as to accuracy. In the first place some people, knowing that they were color blind, would be interested in having their eyes checked, which increased the percentage of those who were color blind to a figure higher than normal. On the other hand, many who were ignorant of their color blindness learned that something was wrong with their eyes through listening to the normal persons read the charts, and then refused to have their eyes tested because of self-consciousness.

The figures we obtained for women corresponded closely to those given by medical texts which are .1% to 1%; our figure was .432%. The figures given for men vary with different authors; one authority gives 2 to 4%, while another gives as high as 5%; our figure was 7.5% for men.

Color blindness (with the exception of a few who might be color blind because of disease or eye injury) is congenital. It is an inherited trait transmitted by the female to the male in a way analogous to the transmission of hemophilia. In almost all instances, color blindness is limited to the two primary colors, red and green, or shades of red and green. There are, however, a limited few with complete loss of color vision to whom the external world appears only in shades of gray.

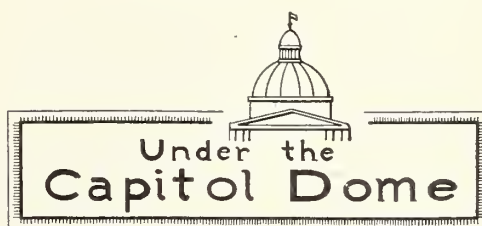
Statistics on visual acuity were taken only the first two days. At this time it was decided to concentrate on the color blind tests, so that a larger number of persons could be tested for purposes of statistics. Visual acuity tests for the remainder of the Fair week were run only at the request of the individual, usually someone interested in a child of school age. In this connection it is of interest to note that there were many chil-

dren who showed marked visual impairment, and in these instances the parents were advised to take the children to their family physicians for a more complete eye examination, or if the physician did not do this kind of work, to go to him for his advice and reference to someone who could do the work. We believe that this examination was of distinct importance inasmuch as the parent was with the child, and the impairment of vision was obvious to the parent as well as to other parents who were bystanders. We feel sure that this limited number of examinations caused large numbers of parents to become eye-conscious so far as their children are concerned, and will go far in establishing a closer connection between the parent and the family physician.

Good crowds viewed the exhibit and showed much interest especially in the cosmetic display and the color blindness tests.

It is evident that many color blind individuals are driving automobiles and disregarding traffic lights because of inability to recognize the color.

The method of testing which we used was simple, accurate and inexpensive, and might well be adopted by the state as a part of an examination of applicants for drivers' licenses.



#### LICENSES GRANTED

One hundred and forty medical school graduates and three osteopathic graduates were granted licenses during the past month by the State Board of Medical Registration and Examination. They were the successful candidates in examinations conducted by the board in the Claypool Hotel in Indianapolis last June. The highest grade in the examination was made by Robert Bliss Miller, of Argos; the second highest rating was made by Vernon K. Pancost, of Elkhart. All but twenty-four of the new physicians are graduates of Indiana University School of Medicine. Those who received licenses to practice in Indiana are:

Carl O. G. Almquist	Adolph E. Blatt
Marion C. Aker	Henry Bodner
Frank Albertson	McKinley J. Bohannon
Jesse C. Ambrose	Norman R. Booher
Paul B. Arbogast	David Bornstein
Theodore D. Arlook	Albert J. Bown
Frederic L. Baer	Donald W. Brodie
Ralph E. Barnett	George M. Brother
T. T. Benchea	Wendell E. Brown
Cecil K. Bender	Neal D. Carter
Ralph E. Blackford	Grace Cauffman
Eleanor H. Blackledge	William J. Clauser

Frank H. Coble  
Henry G. Coleman  
John H. Combs  
Kenneth E. Comer  
Perry E. Cotton  
Joseph B. Cushman  
Rex W. Dixon  
Melvin Durkee  
Ralph C. Eades  
David E. Engle  
Florence S. Falvey  
William R. Ferraro  
Robert J. Fraser  
Clementine E. Frankowski  
Robert R. Freund  
Max D. Garber  
Frederick L. Giles  
William E. Glass  
Garland R. Gillespie  
Maurice E. Glock  
John T. Hardesty  
Carl B. Harris  
Robert B. Hart  
August M. Hascwinkle  
James H. Hawk  
Gladys M. Hill  
Robert E. Hill  
Richard W. Holdeman  
Charles E. Holland  
Charles O. Holder  
John K. Humphries  
Anson G. Hurley  
Eugene R. Inwood  
Robert E. Jewett  
Oran E. Kay  
Benjamin V. Klain  
Julia G. Kuzmitz  
Charles R. Kempthorne  
Louis T. Kudele  
Arthur Leiter  
Clarence A. Laubscher  
E. Briscoe Lett  
Ermil T. Leslie  
David H. Levy  
James Y. McCullough, Jr.  
James S. McElroy  
William O. McQuiston  
William E. Maine  
Frederick R. Malott  
Ora L. Marks  
Hugh E. Martin  
Earl W. Mericle  
Basil M. Merrell  
Robert B. Miller  
Temple M. Miller  
George H. Mitchell  
Darnell P. Mitchell  
Saint R. Monachino  
A. Berniece Morris

William M. Mount  
Joseph B. Murphy  
Hugh K. Navin  
Preston M. Nesbit  
Frank M. Nichols  
Frank W. Oliphant  
Darrell Overpeck  
Vernon K. Pancost  
Modesto R. Paragas  
William Paris  
Charles H. Proudfit  
Frederick G. Perry  
Hugh S. Ramsey  
George L. Regan  
Edgar E. Richards  
Wayne L. Ritter  
O. R. Russell  
Lillian E. Scheib  
Charles P. Schneider  
Charles H. Schutt  
Samuel L. Scott  
Michael Shellhouse  
Philip M. Shipper  
Robert D. Spindler  
Dick Steele  
William R. Storer  
John R. Surber  
William E. Sutton  
Sidney Schreiber  
Kuhzman H. Stephens  
Harry R. Stimson  
Richard W. Terrill  
Hugh K. Thatcher, Jr.  
Thomas K. Tower  
Edward T. Thompson  
Carl J. Trout  
William C. Vance  
Anthony W. Ventimiglia  
J. Thayer Waldo  
Charles E. Webb  
Robert K. Webster  
Joseph L. West  
Aubrey H. Williams  
George W. Willison  
Robert H. Wischeart  
Donald J. Wolfram  
Abram S. Woodward, Jr.  
Robert C. Wybourn  
Jonathan G. Yoder  
John McC. Young  
Leman R. Young, Jr.  
Paul F. Zwerner  
Harold F. Zwick

Osteopathic Certificates:

Walter John Bauer  
Gail G. Jackson  
Robert D. Rogers

\* \* \*

The next meeting of the State Board of Medical Registration and Examination will be held at the board offices, October tenth. There will be several important items for consideration at the session, according to the clerk, Ruth V. Kirk.

\* \* \*

Dr. Verne K. Harvey, director of the Indiana Division of Public Health, has returned from a meeting of the American Public Health Association at Pasadena, California. Miss Eva MacDougall, director of the Indiana Public Health Nursing Bureau, also attended the meeting. Reports at the conference indicated that Indiana has one of the

best public health nursing divisions to be found in the country, Dr. Harvey said. Miss MacDougall is secretary to the public health nursing division of the American Public Health Association.

DIPHTHERIA REPORT FOR AUGUST, 1934

During the month of August, this year, there were three deaths from diphtheria, one each from Grant, Bartholomew, and Vanderburgh counties, Bartholomew County entering the list for the first time this year. This is the smallest number of deaths for the month of August in the history of Indiana, and the total of fifty deaths for the first eight months of the year is the smallest number for the corresponding period of any previous year on record.

*The profession is asked to be on the alert for diphtheria during the next two or three months, particularly now that school is just starting.* As a rule, the month of October shows a greater number of deaths than any other month during the year. This is largely due to the fact that the disease is likely to be ignored by the parents before calling on the physician, and that the doctor is liable to be caught unaware.

Following will be found the total number of cases by counties for the month of August, along with a record of the number of cases for the first eight months of the year:

Aug. Total for			Aug. Total for		
County	1934	1934	County	1934	1934
Allen .....	0	6	Lawrence .....	0	5
Bartholomew ...	1	1	Marion .....	0	5
Delaware .....	0	1	Martin .....	0	1
Blackford .....	0	1	Montgomery ...	0	1
Dubois .....	0	2	Perry .....	0	4
Fayette .....	0	1	Randolph .....	0	1
Gibson .....	0	1	Spencer .....	0	2
Grant .....	1	2	Warriack .....	0	1
Greene .....	0	2	Vanderburgh ...	1	3
Harrison .....	0	1	Vermillion .....	0	1
Jackson .....	0	2	Wayne .....	0	2
Knox .....	0	2			
Lake .....	0	2	Total .....	3	50

SECRETARIES' COLUMN

Hurrah! It will not be long now until the State Association meets in Indianapolis. The dates—ninth, tenth and eleventh of October—only about one week for you to make plans to attend!

Mr. Secretary, plan to come to this meeting. There will be many things talked over and decided, and you should take these messages home to your society. The more first hand knowledge you have, the better you can serve your society.

Some of the things to be discussed will be the constitution and by-laws of the State Association,



sickness insurance, unemployment insurance, problems for the next legislature, and many others.

The scientific program is well balanced and will be unusually instructive.

The scientific exhibit will be the best ever shown.

This year the secretaries and presidents of county societies will be privileged to attend the first meeting of the House of Delegates, Tuesday afternoon, October ninth, at four o'clock, in the Riley Room of the Claypool Hotel. Much of interest will be discussed. Avail yourself of this opportunity to see your House of Delegates in action.

Have you talked to your candidates for office? If you have not, you had better get busy; it will mean a lot to the doctors.

Hoping to see you in Indianapolis at the annual convention, I am,

Your chairman,

A. M. MITCHELL, M. D.

## DEATH NOTICES

WILLIAM B. KREIDER, M. D., of Goshen, died August twenty-eighth, aged eighty-five years. Dr. Kreider was eligible for honorary membership in the Indiana State Medical Association. He graduated from the Chicago Homeopathic Medical College in 1879.

WILLIAM PALM, M. D., of Brazil, died suddenly September tenth, following a heart attack. He was fifty-nine years of age. During the World War Dr. Palm served in France with the medical corps of the 549th Engineers and received a captain's commission following his service. He had served as president of the Clay County Medical Society and of the Fifth District Medical Society and was Clay County health commissioner at the time of his death. He was a member of the Clay County Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from the Medical College of Indiana, Indianapolis, in 1905.

HARVEY S. COOK, M. D., Valparaiso, died September first, aged forty-six years. Dr. Cook graduated from the Chicago College of Medicine and Surgery in 1913, and was a member of the Porter County Medical Society, the Indiana State Medical Association, and the American Medical Association.

J. M. AMISS, M. D., of Silver Lake, died September sixth, aged eighty-two years. Dr. Amiss was a graduate of the Medical College of Indiana, Indianapolis, in 1880.

JOHN A. WELCH, M. D., of Letts, died August thirty-first, aged sixty years. Dr. Welch was a member of the Decatur County Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from the Hospital College of Medicine, Louisville, in 1898.

NOAH W. MURPHY, M. D., of Vincennes, died August twenty-eighth, aged fifty-seven years. Dr. Murphy was a graduate of the Medical College of Indiana, Indianapolis, in 1905.

## HOOSIER NOTES

DR. G. G. CAMPBELL has moved from Wheeler to East Gary where he will practice.

DR. EDWIN L. LIBBERT, Lawrenceburg, has moved from Walnut Street to 6 West High Street.

DR. A. N. ROBERTSON, Salem, has moved to New Albany where he will practice medicine.

DR. W. LENNIS GREEN has located in Columbus where he will conduct a general practice.

MISS MILDRED LAWRENCE and Dr. Earl Conover, of Evansville, were married September third, in Evansville.

DR. H. N. MIDDLETON, Negro physician, has moved from Anderson to 2101 Boulevard Place, Indianapolis.

DR. J. H. WEINSTEIN, president of our State Association in 1933, is vacationing at Jenny Lake, Jackson Hole, Wyoming.

DR. HARRY B. THOMAS, Bloomington, has purchased the office and residence of Dr. O. M. Morris at 334 South College Avenue, where he will be located.

THE St. Joseph County Medical Society will resume its regular meetings on October second, when a program concerning cancer education will be presented.

PHYSICIANS who composed base hospital No. 32, an Indianapolis unit during the World War, met Saturday, September eighth, at the Claypool Hotel, for their seventeenth annual reunion.

DR. M. A. AUSTIN, of Anderson, is remodeling his home at 238 West Twelfth Street, returning the building to its original shape as first erected in 1880. Dr. Austin's residence and office will be in this building when completed.

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DR. A. M. MENDENHALL, of Indianapolis, attended the annual meeting of the American Association of Obstetricians, Gynecologists and Abdominal Surgeons at White Sulphur Springs, West Virginia, in September and was re-elected secretary of the association.

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DR. AND MRS. FRANK E. WIEDEMANN, of Terre Haute, have returned from Russia and the Scandinavian countries where they spent the summer. Dr. Wiedemann was interested in the modus operandi of socialized medicine as applied to the Russian regime.

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SEVERAL Indiana physicians attended the meeting of the American Association for the Study of Neoplastic Diseases in Washington, D. C., in September. Dr. Chester A. Stayton, Dr. H. C. Thornton and Dr. E. N. Kime, of Indianapolis, were guests of Dr. C. H. Bloodgood at a dinner given September eighth, at the time of the meeting in Washington.

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THE Cook County Graduate School of Medicine will offer, beginning October twenty-second, a two weeks' intensive course in internal medicine, a two weeks' course in ear, nose and throat, and a ten days' intensive course in fractures and traumatic surgery. Number of registrants will be limited and the courses will be given only if the required number is registered. Clinical work will be given in the Cook County Hospital, and the didactic work in the school building.

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THE Association of Military Surgeons of the United States will hold its 42nd annual convention at Field Medical Service School, U. S. Army, Carlisle, Pa., October 8, 9, 10, 1934. The meetings will demonstrate the latest field medical equipment for the treatment of the sick and wounded and their evacuation from the field of battle, and also field sanitary appliances. The Association extends to the members of the Indiana State Medical Association an invitation to attend these meetings.

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THE International Assembly of the Inter-State Post-graduate Medical Association of North America, which will meet in Philadelphia November 5th to 9th, will include a list of distinguished teachers and clinicians. This is the first time that the As-

sociation has met east of the Alleghenies. There will also be pre-assembly clinics, November third, and post-assembly clinics, November tenth, in Philadelphia hospitals. Detailed information and program may be obtained by writing to the Association at Freeport, Illinois.

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THE Staff Society of the Indianapolis Methodist Episcopal Hospital recently presented the medical library with a set of Tice's Loose Leaf Medicine. The library also has been given bound copies of S. G. and O. from 1915 to the present date, and a set of Lewis' Loose Leaf Surgery, the gift of Dr. E. D. Clark, who also presented a set of bound volumes of the Medical History of the Civil War. Dr. H. H. Wheeler has given the library a series of bound volumes of International Surgical Clinics, and Dr. H. O. Mertz was the donor of several volumes of the Quarterly Cumulative Index Medicus.

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DR. H. O. MERTZ, of Indianapolis, will present two papers before the Kansas City Southwest Clinical Society at Kansas City, Missouri, October 1 to 4, 1934. His subjects will be "The Urologists' Contribution to the Differential Diagnosis of Abdominal Conditions," and "Urology in Children." Others included in the list of distinguished guests who will address the meeting are Dr. Walter L. Bierring, Des Moines, Iowa, president of the A. M. A.; Dr. Morris Fishbein, Chicago; Rev. Alphonse M. Schwitalla, St. Louis; Dr. H. W. Woodruff, Joliet, Ill.; Dr. George E. Pfahler, Philadelphia; Dr. J. B. DeLee, Chicago; Dr. Hugh Cabot, Rochester, Minnesota; Dr. Samuel A. Levine, Boston; Dr. Philip Lewin, Chicago; Dr. Lee F. Hill, Des Moines, Iowa; Dr. Samuel Iglauer, Cincinnati; and Dr. F. W. Rankin, Lexington, Ky. This is the twelfth annual fall clinical conference of the Kansas City Southwest Clinical Society.

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AT THE serologic conferences in Copenhagen and Montevideo, the test of only one serologist of the United States was presented for consideration and since the conferences, there has been an increased interest in the relative value of serologic tests for the diagnosis of syphilis. There are many excellent serologists in this country who have described original modifications of the complement-fixation and precipitation tests for syphilis, and it is felt that the tests of these workers merit consideration. The United State Public Health Service is co-operating with the American Society of Clinical Pathologists in the drafting of a plan to evaluate independently serologic procedure for the diagnosis of syphilis in this country. The plan contemplates collection of specimens of blood from at least 1,000 individuals and the distribution of comparable specimens to the laboratories of serologists who have described an original modification of a complement-



fixation or precipitation test for the diagnosis of syphilis. Donors of specimens will be carefully selected, and arrangements will be made so that serologists at various points will receive the specimens at approximately the same time. A committee of five members consisting of two specialists in the field of clinical syphilology, two members of the American Society of Clinical Pathologists, and one officer of the United States Public Health Service, will organize the plan of study and after all reports have been submitted by participating serologists, will interpret the results on the basis of clinical findings. It is possible that the name of some serologist who has described an original modification of a test for syphilis may have been inadvertently omitted. Any serologist desiring to participate will be extended an invitation upon presentation of suitable proof as to the originality of his modification of a serologic test. A brief description of the plan will also be sent to those workers who may be interested. Correspondence should be addressed to the Surgeon General, United States Public Health Service, Washington, D. C.

#### ELEVENTH COUNCILOR DISTRICT MEETING

The Eleventh Councilor District Medical Society will hold its meeting at Logansport, October seventeenth. The program is as follows:

10:00 a. m. Morning session at the Northern Indiana Hospital at Logansport; clinic on mental and nervous diseases.

1. Manic-depressive psychoses—Dr. C. L. Williams.
2. General paralysis of insane—Dr. G. H. Steinmetz.

2:00 p. m. Business and scientific program will also be held at the Northern Indiana Hospital. Afternoon scientific program:

Symposium: Dr. Franklin G. Ebaugh, of Denver, Colorado, and Dr. Lawrence H. Gilman, Indianapolis. Discussants: Dr. Larue D. Carter, Indianapolis, Dr. Max A. Bahr, Indianapolis, and members and visitors.

6:00 p. m. The evening will be spent at the Memorial Home where a banquet will be served, followed by a minstrel show which will be presented by the Logansport Shrine Club Minstrels. This will be the 177th appearance of this organization.

Ladies will be entertained by a committee of physicians' wives with Mrs. John Bradfield as chairman. During the morning they will be taken on a tour of the State Hospital, and in the afternoon there will be entertainment.

A cordial invitation is extended to all members of the Indiana State Medical Association to attend this meeting.

#### INDIANA ANESTHETISTS MEET IN LAFAYETTE

At the invitation and as the guests of Dr. Floyd T. Romberger, Lafayette, twenty-eight physician-anesthetists, representing every section of Indiana,

assembled for a dinner meeting Tuesday evening, September eleventh, at the Purdue Memorial Union Building, Purdue University, Lafayette. It is believed that this was the first gathering of its kind in the history of organized medicine in Indiana. The primary purpose of the meeting was to establish contact between the Purdue Research Foundation and the actively practicing specialists in anesthesia throughout the state. The doctors were addressed by Director of Research, G. Stanley Meikle, Purdue University, upon the organization and development of the Purdue Research Foundation. He stressed in particular the facilities as now available at Purdue for those willing and capable of engaging in scientific research activities. He mentioned the benefits accruing from thus tying the basic sciences as exemplified in Purdue University to the clinical applications of the same in the practice of medicine.

Dr. F. S. Crockett, Lafayette, member of the Indiana State Board of Medical Registration and Examination, discussed the recent ruling of the board to the effect that the administration of an anesthetic was in deed and in fact medical practice. He spoke of the relationship necessarily existing between the professional anesthetist on the one hand and the surgeons and hospitals on the other.

Dr. Romberger reported his experience, and a short review of the literature, in the use of the heretofore relatively rare anesthetic gas, cyclopropane, mentioning the twelve hospitals throughout the United States and Canada in which scientific data is being accumulated. He predicted that the discovery last year of a low-cost method for the production of cyclopropane by the Purdue Research Foundation ultimately would lead to a more widely spread application of this gas in surgical anesthesia, to the greater benefit of suffering humanity.

At the round-table debate following the dinner, many problems of social and economic importance were discussed. The relationship between the public weal and scientific anesthesia was stressed. Physician anesthetists representing hospitals in the following cities outside of Lafayette were present: Anderson, Bedford, Columbus, Crawfordsville, Elkhart, Evansville, Fort Wayne, Gary, Indianapolis, LaPorte, Mishawaka, South Bend, and Terre Haute.

A petition was prepared and signed, looking toward the organization of a Section in Anesthesia in the State Association.

In addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories

Ophthalmic Ointment Butyn 2% and Metaphen 1:10,000

Don Baxter Intravenous Products Corporation

Dextrose Solutions 2½%, 5%, 7½%, 10% and 25% in Half-Size Vacoliter Containers

Dextrose 2½%, 5%, 7½% and 10% in Physiological Sodium Chloride Solution in Half-Size Vacoliter Containers

Cheplin Biological Laboratories, Inc.

Cheplin's Ampules Dextrose (d-Glucose) U. S. P., 50%, 50 cc. (Buffered)

Cheplin's Ampules Dextrose (d-Glucose) U. S. P., 50%, 50 cc. (Unbuffered)

Cheplin's Ampules Dextrose (d-Glucose) U. S. P., 10 gm., 20 cc. (Buffered)

Cheplin's Ampules Dextrose (d-Glucose) U. S. P., 50 gm., 100 cc. (Buffered)

Cheplin's Ampules Dextrose (d-Glucose) U. S. P., 50 gm., 100 cc. (Unbuffered)

Eli Lilly & Company

Diphtheria Toxoid, Alum Precipitated (Refined)—Lilly

Parke, Davis & Co.

Normal Horse Serum—P. D. & Co., one 1 cc. rubber stoppered vial packages

Rabies Vaccine (Cumming), seven vial packages

Scarlet Fever Streptococcus Toxin for the Skin Test—P. D. & Co., one 10 cc. vial package

Reinschild Chemical Co.

Agar-Agar Shreds

Frederick Stearns & Co.

Neo-Synephrin Hydrochloride Emulsion (Aromatic)

Procaine-Neo-Synephrin Hydrochloride Hypodermic Tablets

E. R. Squibb & Sons

Refined Diphtheria Toxoid Alum Precipitated—Squibb, ten 0.5 cc. vial packages

The following product has been accepted for inclusion in the List of Articles and Brands Accepted by the Council but not described in N. N. R. (New and Non-official Remedies, 1934, p. 439):

Don Baxter Intravenous Products Corp.

Physiological Sodium Chloride Solution in Half-Size Vacoliter Containers

## BOOK REVIEWS

**THE COMPLEAT PEDIATRICIAN.** Practical, Diagnostic, Therapeutic and Preventive Pediatrics. For use of medical students, internes, general practitioners and pediatricians. By Wilburt C. Davison, M. A., D. Sc., M. D., Professor of Pediatrics, Duke University School of Medicine, and pediatrician, Duke Hospital. Cloth. Printed by Seeman Printery, Durham, N. C., for Duke University Press, 1934.

**HUMAN STERILITY.** Causation, Diagnosis, and Treatment. A practical manual of clinical procedure. By Samuel R. Meaker, M. D., Professor of Gynecology, Boston University School of Medicine, etc. 276 pages with 27 original illustrations. Cloth. Price, \$4. The Williams and Wilkins Company, Baltimore, Maryland, 1934.

**MODERN TREATMENT IN GENERAL PRACTICE.** Edited by Cecil P. Wakeley, D. Sc., F. R. C. S., editor of "The Medical Press and Circular," London. 426 pages. Cloth. Price, \$4. Printed in Great Britain. William Wood and Company, Baltimore, Maryland, 1934.

**INTERNATIONAL CLINICS.** A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles. Edited by Louis Hamman, M. D., visiting physician, Johns Hopkins Hospital, Baltimore, Md., with the collaboration of fourteen prominent physicians. Volume III, forty-fourth series, 1934. J. B. Lippincott Company, Philadelphia.

**SURGICAL CLINICS OF NORTH AMERICA.** Issued serially, one number every other month. Volume 14, Number 4. Chicago number—August, 1934. 288 pages with 88 illustrations. Per clinic year February, 1934, to December, 1934. Paper, \$12.00; cloth, \$16.00, net. Philadelphia and London: W. B. Saunders Company, 1934.

**BRONCHOSCOPY, ESOPHAGOSCOPY AND GASTROSCOPY.** By Chevalier Jackson, M. D., Sc. D., LL. D., F. A. C. S., Professor of Bronchoscopy and Esophagoscopy, Temple University; Bronchoscopist, Temple University Hospital; and Chevalier L. Jackson, A. B., M. D., M. Sc. (Med), F. A. C. S., Professor of Clinical Bronchoscopy, Temple University Hospital. Third edition, reset. 485 pages with 207 illustrations and 15 color plates. Philadelphia and London: W. B. Saunders Company, 1934. Cloth, \$9.00, net.

## SOCIETIES AND INSTITUTIONS

### COUNTY SOCIETY MEETINGS

BOONE COUNTY MEDICAL SOCIETY members met at Lebanon, September eleventh, at noon, for a round-table discussion.

CARROLL COUNTY MEDICAL SOCIETY was entertained August tenth at Brighthurst, at the home of Dr. and Mrs. Emmerson Carter. Dr. O. N. Torian, Indianapolis, spoke on "Childhood Anemia." Dinner was served by the M. E. Missionary Society.

On September eleventh, the society met at Camden to hear Dr. Goethe Link, Indianapolis, read a paper on "Symptoms of Acute and Chronic Goiter." Thirteen members and five visitors were present.

CLINTON COUNTY MEDICAL SOCIETY met in regular session at the Coulter Hotel, Frankfort, September sixth, with Dr. John H. Warvel, Indianapolis, as the principal speaker. An invitation to members to attend the Eleventh District meeting at Logansport, October seventeenth, was read to the members. Dr. Bruce A. Work was elected a member of the society. Dr. Warvel presented a lecture and led in a round-table discussion of "Diabetes."

DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY members met at the Roberts Hotel, Muncie, September eighteenth. Dr. Henry E. Bibler, Muncie, read a paper on "Encephalitis" to the eighty attendants. Dr. L. G. Montgomery, Muncie, presented lantern slides and discussed pathology of fourteen recent cases.



# THE JOURNAL

OF THE

## INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

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### ORIGINAL ARTICLES

#### THE INDIANA STATE MEDICAL ASSOCIATION AS A FACTOR IN MEDICAL EDUCATION\*

E. E. PADGETT, M. D.  
INDIANAPOLIS

The past few years have witnessed many drastic changes in our economic and social life, and we have been kept busy, bearing in mind the requirements necessary to meet these ever-changing situations. As a result, our time and energies have been largely spent in thinking, talking, and planning our state medical affairs in terms of medical economics. In fact, such a large place has been given to this phase of medical affairs that we are prone to pause and ask whether, in our mad rush to adjust ourselves to the changing conditions, we have not lost sight of the educational advantages of our Association?

A survey of our activities in the past few years will indicate that this is not true; on the contrary, the educational phases of our work actually have improved during this hectic period, and this fact more than any other one stands out in our minds with great clarity. It is a source of much satisfaction. It serves again to show the real nature of the work of our profession to us as a profession, and to the public. It labels the physician as an individual apart from the mine-run of people. His patient, calm acceptance of conditions, and the energetic and determined spirit with which he has met his own problems and continued to care for the sick and needy renders him little short of heroic. His calm demeanor has done more than that of any other class to keep our country on an even keel and to keep our people from the panic of fear.

A calm demeanor on the part of the profession is expected, and this is as it should be, for who in any community is better trained or more capable of self-control than is the physician? It is to the physician that the public instinctively turns in time of greatest trouble. In our own state, all of our records will show that he has not been found wanting. From time immemorial the medical man has been respected by his fellow men. He has been credited with powers often magical and often mistaken, but he and his understanding of life have continually been held in respect and reverence.

The respectful attitude of the public toward the physician is vitally essential to the health and well-being of the public, as well as to the continual progress of the medical profession. The necessity of maintaining this position, and the equal necessity of improving ourselves in order to meet the increasing demands upon us, is, after all, the reason for the existence of our Indiana State Medical Association as well as all of our medical organizations.

The efforts of the profession in Indiana to keep abreast of the times during the past few years are described in the following paragraphs.

#### OUR COUNTY SOCIETIES

Indiana, as you know, is divided into ninety-two counties and thirteen districts. This does not mean that we have some counties without societies, but that in some instances two counties have united to form one medical society. These county societies are the vital units of our organization. In fact, it is for the benefit and perpetuation of the societies that our district societies, our state association, and even our American Medical Association exists. Be not mistaken; the important unit in all medical organization is your county medical society. This importance has been increased in Indiana by our present arrangement in our set-up of the Indiana Division of Public Health. All of you are familiar with the plan. The essential feature of it is that you, in your county society, are responsible for the health of your community, both private and public. It not only implies, but it

\* Presidential address presented before the annual session of the Indiana State Medical Association, Indianapolis, October 10, 1934.

carries with it directly to the door of your county society the responsibility of the health of your community, embracing the triple duties of education, prevention and cure. Up to the present, which in reality spans a short space of time, our societies have met this obligation with credit to themselves, and they have succeeded in focusing the eyes of the nation on Indiana and its plan of caring for the sick.

Within the past two years it has been my pleasant privilege to attend many county society meetings in various parts of Indiana, and I am more than ever convinced that the county society is our greatest agent in the field of postgraduate study. Here each member is an integral part of the organization and has not only the privilege and the duty of attending, but also of participating in the essays and discussions. First, then, among our agents of postgraduate education stands the county medical society.

Any man in the practice of medicine who, for any reason, denies himself the privilege of participating in the work of his county medical society, not only cripples himself, but fails to that extent in his duty to the public.

#### PROGRAMS

The majority of the programs arranged for county medical society meetings have been of the highest quality. After all, there is no subject in medicine that cannot be made profitable to the members of the profession if the proper interest is manifested. No physician ever really graduates, and in no other class of men is self-effort more essential than in medical education.

If I were to make any criticism of county society programs, it would be that we have developed a little too far the habit of importing speakers from outside the state. You know that Indiana has just as good physicians as any state in the Union, and after all, these county societies belong to you. I do not wish to decry outside speakers; rather, I wish to emphasize the value of continuous training by direct participation in programs by our own men.

#### DISTRICT SOCIETIES

Each district has one or more annual meetings. It has been my privilege to be present at nearly all such meetings this year.

One feature of these meetings is very gratifying. Very little time is given to routine business, and as a rule the day and evening is spent in the presentation and discussion of scientific papers. This is the true spirit of postgraduate study. Such programs are especially helpful to the man in general practice. Here you meet your next-door neighbor and discuss matters that affect you in common.

As a point of observation, one cannot help noticing that among these district societies the greatest

interest is manifested in those that have more than one meeting each year.

#### STATE POSTGRADUATE COURSES

Some four years ago, the Indiana State Medical Association undertook to provide, in addition to the annual meeting, a course of one or more days of postgraduate study. The first meeting was held in Indianapolis in 1932, the second in Richmond in 1933, and the third in Evansville in 1934. These courses are given with the idea of intensive study. Papers are presented in succession and without discussion throughout the days and evenings. Many out-state speakers are invited, although most of the work is done by Indiana men. A small registration fee is charged to help defray expenses. These meetings have been wonderfully well attended, and the interest has been intense; for example, during the Evansville session, in the evening, one man spoke on heart disease, and he consumed two hours of time during which no one left the room. It has been suggested by many members that these courses be arranged twice a year, and I believe this is a good suggestion, for the meetings are inexpensive and are of the utmost value to men in general practice. As others have already expressed the idea, I believe also that the meetings could be extended to cover a period of at least two days, during which time there should be presented clinical work as well as didactic work.

#### INDIANA UNIVERSITY POSTGRADUATE COURSES

In addition to courses planned by our own Association, the Indiana University School of Medicine gives two splendid postgraduate courses—one by Dr. Barnhill which course concerns surgery of the head and neck and is limited to men interested in this field; and another given by members of the faculty. These are valuable and intensive courses. Given as they are by our own and only medical school, they are and should be of interest and value to every physician in the State. It is quite safe to say that they would probably be in greater favor and would be much better attended if the University would refrain from competition with the practicing physician by refusing to treat pay cases.

#### ANNUAL MEETING OF STATE ASSOCIATION

While we believe that every day is postgraduate day for the physician, we believe that if he so desires he may cap his year's work by attendance at the annual meeting. While the business of the Association must necessarily occupy a certain part of the time, we like to think of our annual convention primarily as a postgraduate session. This year and for many years past, the program has been arranged with that idea in mind.

This year the program has been carefully planned with the best interests of the man in general prac-



tice in mind. However, we have provided for the specialist by the usual section meetings. We have chosen to have two general sessions instead of one, because we believe the topics discussed will be of value to the specialist as well as to the general practitioner. The Committee on Scientific Work deserves the credit for the planning and arranging of the program. They have wisely selected subjects of wide and diversified interest, and we believe that there will be food for reflection and benefit for all of us. The arrangement for discussions is an improvement as well as a time-saver, and we hope you will all take advantage of this opportunity.

#### SCIENTIFIC EXHIBIT

Our scientific exhibit has grown in size and importance from year to year. By this time it has assumed a place of importance as an educational feature that cannot be overlooked. If you deprive yourself of this aid to your course, you have missed a well-planned feature for your entertainment and enlightenment.

#### THE JOURNAL

Twelve times a year your JOURNAL reaches your desk. This is your State Association's means of conveying to you the efforts of your fellow-workers. Some of you are unable to attend the annual meeting and, therefore, are unable to hear the papers as presented. Because of our long-established rule, all papers presented at this meeting are the property of the Association, and all sooner or later appear in the pages of the THE JOURNAL. Nor is this all. Many papers appear in THE JOURNAL which were not read at the state meeting. This is a very definite agent in your efforts at self-education, and your failure to open and read your JOURNAL is your own loss, and I can assure you that it is a real loss. For example, through our October issue, there have been printed sixty-one papers, twenty-one from the annual meeting at French Lick, and forty independent contributions.

#### BUREAU OF PUBLICITY

In the year 1922, through the efforts of our own Dr. William N. Wishard, there came into being in connection with our State Association, an innovation, a plan entirely new in its purposes in state medical organizations. I refer, of course, to the establishment of our Bureau of Publicity. An agency born of unselfish devotion to the public and the practice of medicine, this plan has probably done more toward disseminating information to the public than any other one factor in our Association. It tells the public, and incidentally the physician, the essential facts from time to time concerning health. The articles are so prepared that they are easily understood and it is made clear that they are backed by the authority of organized medicine. Very much to our gratification, the public at

once showed its appreciation of our efforts in this direction. The press gave us a kindly reception, and the scope of this work has grown until at the present time we are supplying, weekly, the following releases: To the public press (newspapers and magazines in Indiana), 200 releases; hospital guilds, 150 releases; public health nursing association, 50 copies weekly; W. C. T. U. for distribution, 50 copies weekly; a copy of each release is sent to each county medical society secretary and each councilor; and last, but not least, the Parent-Teacher Association which used to require 850 copies of our releases weekly, now publishes the releases verbatim in its own publication.

#### THE FUTURE

Because of the able and untiring efforts of our executive secretary and his office force, Indiana has reached an enviable position in the organization of her medical affairs. Many are the inquiries that come from other states to our headquarters office concerning our organization work. Our post-graduate work must not, and need not, lag behind our organization work. Our facilities are second to none. Our medical students graduate with high standing and take places of high rank as internes or residents in some of the finest hospitals and clinics in the land. They return to us to practice, and become an integral part of our Association. They are anxious to continue their work and to carry on. What better material can we hope to have than this in the production of our papers and discussions? We shall not fail them.

This year we have tried an innovation which has succeeded, and which we hope to see developed further. Those of you who were here yesterday had opportunity to attend meetings of the Public Health Officers of Indiana, the Indiana Hospital Association, the Hospital Librarians' Association, and the Directors of Child Health. This is a good beginning. For myself, I paint the following picture:

First: The Indiana State Medical Association paying from its treasury all of the expenses of its annual meeting.

Second: This meeting held each year in Indianapolis where hospital facilities are always present.

Third: Extending the time of this annual meeting to include at least four days, or perhaps a week.

Fourth: Intensive programs devoted largely to the interest of the man in general practice, and made up of both presentation of patients and didactic work.

Fifth: A meeting here at the same time of all agencies concerned in health work, both public and private.

In other words, I predict that in the future our annual meetings will provide a genuine health week for Indiana.

## THE RELIEF OF PAIN IN SINUSITIS

WILLIAM C. REED, M. D.  
BLOOMINGTON

The satisfactory relief of severe or protracted pain from infection of the maxillary or frontal sinuses is a practical daily problem in the life of physicians practicing in the Middle West. The writer accordingly desires to report his experiences during one winter in experimentation with analgesics containing amidopyrine.

Patients spontaneously demand the prompt relief from the severe pain of sinusitis which is given by pyrazolon drugs. Hence, it was decided early in this investigation to discard compound mixtures of drugs and particularly those containing acetylsalicylic acid and similar analgesics. Two amidopyrine derivatives, magnepyrine and amidopyrine, were selected for use and it is desired here to report fifty-one cases upon these forms of medication. Magnepyrine is a magnesium-potentiated amidopyrine; pyramidon is a proprietary form of amidopyrine. Both materials had been in use prior to the start of this investigation for some years and have an abundant medical and pharmacologic literature.

The essential pharmacology of amidopyrine has been well covered by Cushny<sup>1</sup> and Solis-Cohen.<sup>2</sup> It is beyond the scope of this paper to discuss the relative merits or lack thereof in the theory of magnesium synergism as advanced by Gwathmey<sup>3</sup>, and Barbour,<sup>4</sup> and others. For the interest of such readers as may desire to follow up the matter, there is appended a brief bibliography covering the recent major publications upon amidopyrine in its various forms.<sup>5-10</sup>

Unselected cases of severe pain, chiefly due to sinusitis, were treated as they presented themselves in the writer's private practice. A consultant in rhino-otolaryngology was made use of in all cases where prompt local treatment was necessary. It may be assumed, therefore, that all cases which required local lavage received that treatment co-

incidentally with the medication prescribed, and irrespective thereof. Both drugs were given in five-grain tablets and patients were not told the name of the drug they were using. Identification of the drug they were using could be made only by that which was given first and that which was given second. In some cases magnepyrine was given first and in others pyramidon. The patient's preference subsequently, if any, had to be expressed in "that first drug" or "that second drug," and was identifiable only by the writer. They were given varying dosage as required for the circumstances of the case. The acute conditions were followed up at intervals of one, two, or three days; and subsequently at intervals of a week when the primary severe pain had been relieved and the inflammation was subsiding. A careful clinical study some years ago by Weston<sup>11</sup> has correctly estimated the difficulty of assaying such a subjective symptom as pain from the subjective reac-

Pain Relief in Acute and Subacute Sinusitis  
On Analgesic-Antipyretic Medication

Number	Initials	Sex	Age	Degree of Pain	Relieved	Unrelieved	Magnepyrine Maximum Dosage per day	Relieved	Unrelieved	Pyramidon Maximum Dosage per day
1	C. S.	F.	57	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 2 hr.
2	M. J.	F.	31	+++	0	+	5 gr. q. 4 hr.	+	0	5 gr. q. 2 hr.
3	K. L.	M.	20	+++	+	0	5 gr. q. 4 hr.	+	0	5 gr. q. 2 hr.
4	C. M.	F.	29	+++	+	0	5 gr. q. 4 hr.	+	0	5 gr. q. 2 hr.
5	V. T.	+	26	+++	+	0	5 gr. q. 4 hr.	+	0	5 gr. q. 2 hr.
6	R. T.	F.	19	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 3 hr.
7	M. K.	F.	48	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 2 hr.
8	A. S.	F.	41	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 2 hr.
9	A. S.	M.	36	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 2 hr.
10	M. A.	F.	76	+++	+	0	5 gr. q. 4 hr.	+	0	5 gr. q. 2 hr.
11	A. S.	F.	28	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 2 hr.
12	J. F.	F.	76	+++	+	0	5 gr. q. 4 hr.	+	0	5 gr. q. 2 hr.
13	J. H.	M.	54	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 2 hr.
14	S. C.	M.	19	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 2 hr.
15	S. F.	F.	22	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 2 hr.
16	M. B.	F.	46	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 4 hr.
17	M. D.	F.	19	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 3 hr.
18	M. M.	F.	54	+++	+	0	5 gr. q. 4 hr.	+	0	5 gr. q. 4 hr.
19	L. R.	F.	36	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 4 hr.
20	M. R.	F.	43	+++	0	+	5 gr. q. 3 hr.	0	+	5 gr. q. 3 hr.
21	Y. S.	M.	22	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 3 hr.
22	M. McF.	F.	35	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 3 hr.
23	M. S.	F.	24	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 2 hr.
24	F. F.	F.	24	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 3 hr.
25	C. L.	F.	42	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 3 hr.
26	M. M.	F.	42	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 3 hr.
27	D. M.	F.	20	+++	+	0	5 gr. q. 4 hr.	+	0	5 gr. q. 4 hr.
28	M. J.	F.	37	+++	+	0	5 gr. q. 4 hr.	+	0	5 gr. q. 4 hr.
29	S. G.	M.	26	+++	+	0	5 gr. q. 4 hr.	+	0	5 gr. q. 4 hr.
30	M. M.	F.	28	+++	+	0	5 gr. q. 4 hr.	+	0	5 gr. q. 4 hr.
31	A. B.	F.	62	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 3 hr.
32	J. H.	M.	24	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 3 hr.
33	V. N.	F.	24	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 2 hr.
34	M. R.	F.	26	+++	+	0	5 gr. q. 4 hr.	+	0	5 gr. q. 2 hr.
35	M. P.	F.	28	+++	+	0	5 gr. q. 4 hr.	+	0	5 gr. q. 2 hr.
36	D. A.	F.	31	+++	+	0	5 gr. q. 2 hr.	+	0	5 gr. q. 2 hr.
37	C. S.	F.	28	+++	+	0	5 gr. q. 2 hr.	+	0	5 gr. q. 2 hr.
38	M. M.	F.	22	+++	+	0	5 gr. q. 2 hr.	+	0	5 gr. q. 2 hr.
39	E. M.	F.	32	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 2 hr.
40	M. R.	F.	23	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 2 hr.
41	N. D.	F.	20	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 3 hr.
42	J. S.	F.	77	+++	+	0	2½ gr. q. 3 hr.	+	0	5 gr. q. 3 hr.
43	E. F.	M.	42	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 2 hr.
44	P. K.	M.	55	+++	+	0	5 gr. q. 3 hr.	+	0	5 gr. q. 3 hr.
45	J. D.	F.	67	+++	+	0	2½ gr. q. 4 hr.	+	0	5 gr. q. 4 hr.
46	J. R.	M.	34	+++	+	0	5 gr. q. 4 hr.	+	0	5 gr. q. 4 hr.
47	D. S.	M.	43	+++	+	0	5 gr. q. 4 hr.	+	0	5 gr. q. 4 hr.
48	O. B.	M.	64	+++	+	0	5 gr. q. 4 hr.	+	0	5 gr. q. 2 hr.
49	M. Mc C.	F.	28	+++	+	0	5 gr. q. 2 hr.	+	0	5 gr. q. 2 hr.
50	M. T.	F.	35	+++	+	0	5 gr. q. 4 hr.	+	0	5 gr. q. 4 hr.
51	M. M.	F.	56	+++	+	0	5 gr. q. 4 hr.	+	0	5 gr. q. 3 hr.

\*Included because comparable to adult dosage.

<sup>1</sup> Cushny, A. R.: *Textbook of Pharmacology*, Lea & Febiger, Philadelphia and New York, Eighth Edition:477.

<sup>2</sup> Solis-Cohen, S.: *Pharmaceutical Therapeutics*, Appleton & Co., New York, Edition 1928:1497.

<sup>3</sup> Gwathmey: *J. A. M. A.*, 76:222, year 1921. Gwathmey: *J. A. M. A.*, 85:1482, November 7, 1925.

<sup>4</sup> Barbour and Winter: *Proceedings, Society Experimental Biology and Medicine*, 25:582, year 1928.

<sup>5</sup> Trippe, C. M.: *Journal of the Medical Society of New Jersey*, 29:50, January, 1932.

<sup>6</sup> Winternitz-Koranyi: Checking Inflammatory Processes with Amidopyrine, *Deutsch. Med. Wchnschr.*, 56:1779, October 17, 1930.

<sup>7</sup> Finkelstein and Neumann: Action of Amidopyrine in Protein Alimentary Fever, *Zeitschr. fur. Kinderheil.*, 51:67, year 1931.

<sup>8</sup> Unverricht: Amidopyrine in Treatment of Fever of Post-infection, *Deutsch. Med. Wchnschr.*, 57:1456, August 21, 1931.

<sup>9</sup> Magazanik, G. L.: Arthritis Therapy with Amidopyrine, *Klin. Med.*, 9:1111 (22), year 1931.

<sup>10</sup> Petranyi, G.: The Effective Treatment of Influenza in Infants and in Young Children, *Amer. Journal of Diseases in Children*, 46:1011, November, 1933.

<sup>11</sup> Weston, William G.: Amidopyrine Analgesia with and without Magnesium Oxide, *Kentucky Med. Journal*, May, 1932.



tions of patients. Nevertheless, even in so small a series as this, one may gain some definite impressions which are worth recording.

The accompanying tabulation is self-explanatory. It represents a preference of patients for the magnepyrine medication which we are at a loss to explain, since the dosage of the latter was generally smaller, there being only about 60 per cent as much amidopyrine in the magnepyrine as in pyramidon. It is scarcely necessary to say that a small series of cases observed in an empirical manner neither proves nor disproves any theoretical considerations involved. No intolerance with either drug was observed.

Of the fifty-one cases of acute and sub-acute sinusitis which were observed on these drugs, two cases, or 5.4 per cent, required magnepyrine, five grains every two hours; eighteen cases, or 48.6 per cent, required magnepyrine, five grains every three hours; fifteen cases, or 40.5 per cent, required magnepyrine, five grains every four hours; and two cases, or 5.4 per cent, received inadequate relief from any dose of magnepyrine employed. In these same cases twelve, or 60 per cent, required pyramidon, five grains every two hours; two cases, or 10 per cent, required pyramidon, five grains every three hours; one case, or 5 per cent, required pyramidon, five grains every four hours; and five cases, or 25 per cent, received inadequate relief from any dose of pyramidon employed. It is obvious that the percentage figures vary widely because of the smallness of the series, and we do not place very much emphasis or reliance upon these apparently wide differences. However, it seems proper to draw from these facts the following:

CONCLUSIONS

- (1) The relief of pain in sinusitis is a practical problem of frequent occurrence in the Middle West.
- (2) At the present time amidopyrine derivatives furnish the prompt and lasting relief demanded in the severe pain of sinusitis.
- (3) A magnesium potentiated amidopyrine appears, in this small series, to be an efficient form of amidopyrine medication.

HYPERTENSION

OBSERVATIONS ON TWO HUNDRED NINETY-THREE EXAMINATIONS OF FIFTY CASES OF ESSENTIAL HYPERTENSION

A. G. MOORE, M. D.  
DEER CREEK\*

It has been my opportunity and pleasure in the last few years to study the case records and the individual cases in the following groups of hypertensives. I have selected from three hundred cardiac cases, fifty which seem to belong in the classi-

fication of essential hypertension. The cases here described are all males.

The point at which a blood pressure becomes high is more or less arbitrary. However, it is the consensus of opinion of most authorities that a persistent systolic pressure of more than one hundred and fifty millimeters of mercury or a diastolic pressure of over one hundred millimeters of mercury constitutes a hypertension, regardless of age. These pressures are exceeded in all the following examinations except in a very few individual readings.

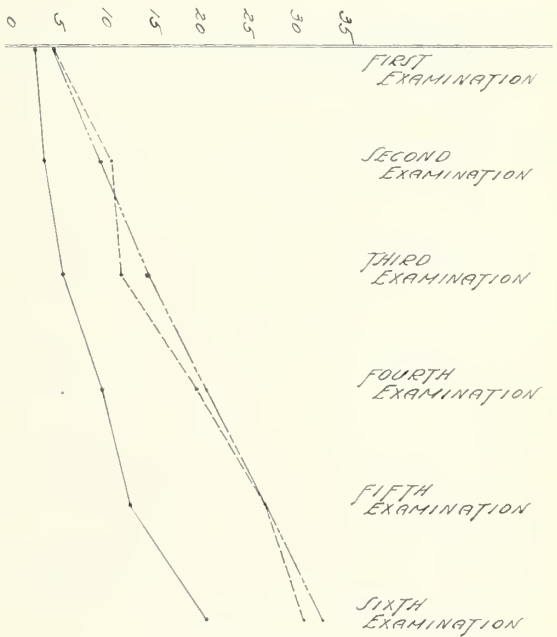


Fig. 1.

Continuous line: Number of accentuated second sounds (aortic).  
Long and short dashes: Number of radial arteries sclerotic to palpitation.  
Short dashes: Number of hearts enlarged as to percussion.

ETIOLOGY

The etiology of hypertension is by no means constant. It occurs as a physical sign in a great variety of pathological conditions. The most common conditions in which we find hypertension in adult man, are essential hypertension, and a diffuse glomerular nephritis.

Of these two conditions, the cases of essential hypertension greatly outnumber those of diffuse glomerular nephritis. It is impossible accurately to differentiate these two conditions except at autopsy or by the history of a comparatively recent acute nephritis. The absence of such a history in all of these individuals makes it probable that they can all be placed in the classification of essential hypertension.

Numerous theories have been advanced to explain the development of essential hypertension,

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but none have been accorded universal acceptance. Therefore, we will not consider this phase. Though we do not believe that the hypertension is, in the strict sense of the word, the essential or primary pathological condition or change which occurs in these individuals, yet from a clinical standpoint we are forced to consider it as such. I believe that all of the pathology which is demonstrable in these individuals can be considered as secondary to their hypertension. These pathological changes as indicated by physical signs will increase with the duration of the hypertension, even though there is no increase in their blood pressure. As the hypertension develops and continues, it places an increased strain, primarily upon the circulatory system, that is the heart and blood vessels. The heart responds to the increased work by hypertrophy.

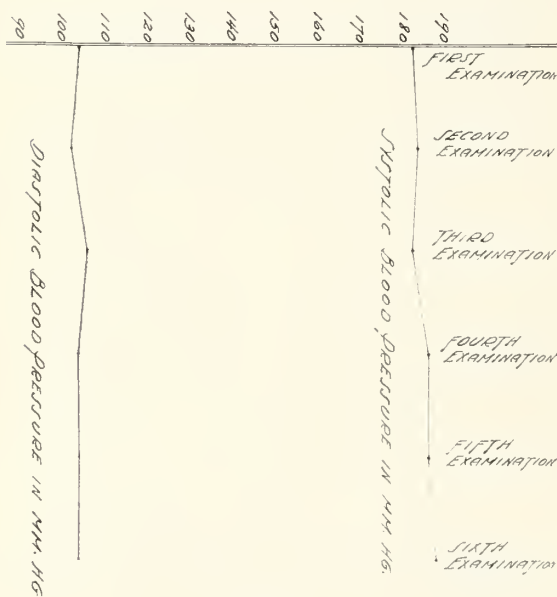


Fig. 2.

The blood vessels react by the development of degenerative changes of varying types and varying degrees, depending apparently upon their size and location. The most constant vascular change occurs in the small afferent arterioles of the kidneys. It is a disputed point whether this sclerosis occurs in all the arterioles of the body. In the larger vessels there is also a progressive sclerosis, which is most marked in the renal artery, the splenic artery, the pancreatic arteries, and the medium-sized cerebral and coronary arteries. It is especially the sclerotic changes in the renal arterioles, the cerebral and coronary arteries, which produce the secondary pathological changes that become significant in the symptomatology of essential hypertension.

It has been impossible to investigate these individuals completely, especially from the standpoint of renal pathology and renal function.

It is interesting to note that in the blood pressure readings of these individuals there has been no significant increase or decrease in either the systolic or diastolic pressures, though it covers an average period of 4.12 years. The most constant physical sign that is found in hypertensive cases (except the hypertension itself) is cardiac hypertrophy. A considerable degree of cardiac hypertrophy is necessary before it can be detected by percussion, which probably accounts for the relatively small number of hypertrophied hearts found at the first examination in this series of cases. Had it been possible to obtain teleoroentgenograms of these cases at their first examination, they would in all probability have shown some degree of enlargement in all cases. Even with this aid it is often difficult to determine just what constitutes a hypertrophy of the heart.

In this series of cases only six, or 12 per cent, showed an increased area of cardiac dullness at the first examination. This percentage gradually increased in each succeeding examination. At the final examination, 4.12 years later, 67 4/10 per cent showed a definitely increased size of the area of cardiac dullness. This is also borne out by the increased percentage of cases in which a displaced apex beat could be palpated at the final examination. Associated with cardiac hypertrophy there is probably, in all cases, some degree of dilatation. It is impossible in the average case in which we find an increased area of cardiac dullness to say how much is due to hypertrophy and how much is due to dilatation. However, as the dilatation increases in degree there is a stretching of the auriculoventricular valvular orifices. As the valve leaflets do not increase in size with the widening of their orifices, a point is finally reached where they are unable to close completely and are, therefore, insufficient in function. This gradual cardiac dilatation is evidenced, in these cases, by the gradual increase in the number of mitral regurgitations as charted. That this does not also occur in the aortic valves is due to the relative strength or inelasticity of the aortic ring. With the single exception of one case of mitral stenosis with regurgitations, we do not believe that any of these valvular insufficiencies are due to actual valvular deformities. The arrhythmias which occur in this type of heart are for all clinical purposes limited to extra systoles or auricular fibrillation. Extra systoles occur in a large percentage of individuals of this age and, as far as is known, they are of no pathological significance. The frequency of their occurrence in any one individual often varies greatly from day to day or under varying circumstances, which are poorly understood. It is, therefore, possible to examine a group of individuals at one time and find a rather high percentage of irregular hearts, and at another time the same group may present a decrease in the number of arrhythmias found. On the other hand, when auricular fibrillation occurs in the hypertensive heart, it is nearly



always a fixed condition. Because of the fact that only one irregular heart was found at the last examination, we can conclude that the arrhythmias occurring in this series were all due to extra systoles and not to auricular fibrillation. With the onset of cardiac decompensation (even of slight degree) there is nearly always an increase in the cardiac rate. In respect to this finding I was unable to find any constant increasing ratio in the progression of essential hypertension in this series of cases.

EFFECT OF HYPERTENSION

The effect of the hypertension on the large and medium sized vessels is well shown in this series of cases. According to Wiggers, "the aortic valves close noiselessly." The aortic second sound is probably produced by the vibrations set up in the wall of the aorta by the rebound of the blood column when the aortic valves close; therefore, it will be increased by any condition, such as dilatation of the aorta, which brings the aortic wall in closer than normal apposition to the chest wall or by conditions which change the elasticity of the aortic wall, such as arteriosclerosis. A continued hypertension tends to bring about both of these conditions and subsequently an accentuation of the aortic second sound. The accentuation of the aortic second sound is a fairly reliable criterion of a sclerotic or dilated aortic wall or a combination of these two conditions. In this series of cases I see a marked increase in the percentage of accentuated aortic second sounds in each succeeding examination. This, I feel, is evidence of a gradually increasing pathology in the aortic wall. It is a well known fact that the medium sized vessels such as the radial arteries undergo sclerotic degeneration due to the strain of a continuously elevated pressure. Evidence of this process is shown by the rapidly increasing percentage of radial arteries which were found to be sclerotic with each succeeding examination. The sclerosis of the cerebral vessels is impossible to discern until it has reached a stage where it produces mental symptoms or evidence of a focal lesion, such as a hemiplegia. This latter condition may be due to either a thrombosis or to an actual rupture of a cerebral vessel wall. Clinically it is impossible to differentiate between these two conditions. Though approximately 19 per cent of hypertensive cases terminate in a cerebral vascular accident, only one occurred in this series and that without fatal result.

The urinary changes in essential hypertension are not constant. If there is no impairment of renal function or failure of the circulation there may be no change in the character or volume of the urine. With the onset of cardiac decompensation there is usually a diminution in volume, or if the renal function becomes impaired the volume is increased. Nocturia is usually due to one of three causes:

- First: The lowered renal function, in which case the urine is of low specific gravity.
- Second: Cardiac failure, because of the better renal circulation while the patient is at rest.
- Third: Enlarged prostate glands, in which case the amount of urine is usually not changed, but the urine shows evidence of infection, that is white blood cells and bacteria.

None of those factors can be evaluated from my statistics. Albumin may or may not be present. Janeway found that in 458 hypertensive patients, 144 did not have albuminuria. If it occurs without cardiac weakness it is presumably derived from those glomeruli which have been seriously damaged by the thickening of the afferent arterioles. Often it is due to a mild cardiac failure and may vary with the state of the circulation through the kidney. In this series one-third showed albumin at the same time. It is probably not of much diagnostic or prognostic significance. The appearance of casts usually parallels that of albumin, and this was found to be comparatively true in this series of cases. In the malignant type of hypertension there are usually considerable quantities of albumin and red blood cells with relatively few casts. No urine of this type was found in any of these examinations.

The finding of glucose in the urine is entirely incidental to hypertension, as diabetes may occur with or without hypertension. If it does occur, the ratio of progress of the arteriosclerosis is probably somewhat more rapid. One should remember that in hypertension the renal threshold for sugar is often high and the blood sugar may be greatly elevated with only a trace of glucose in the urine.

DIAGRAMMATIC CHART OF 293 EXAMINATIONS OF 50 CASES OF ESSENTIAL HYPERTENSION

Number of Examinations.....	50	50	50	50	49	44
Average Age.....	53.18	53.9	54.76	55.4	56.08	57.3
Average Systolic and Dystolic Blood Pressure.....	183.4	185.8	182.8	186.9	186.1	188.9
	104.5	103.4	106.6	105.7	104.7	104.2
Displaced Apex Beats.....	1	4	3	5	5	6
Hearts Normal in Size as to Percussion.....	44	39	38	30	23	14
Hearts Enlarged in Size as to Percussion.....	6	11	12 *	20	27	29
Accentuated Aortic Second Sounds	3	4	7	10	13	21
Mitral Regurgitation.....			2	2	3	4
Mitral Stenosis.....			1	1	1	1
Arrhythmias.....	2	2	2	3	6	1
Pulse 90 or above.....	4	3	6	8	4	4
Radial Arteries Sclerotic to Palpation.....	6	10	15	21	27	31
Cerebral Hemorrhage.....				1		
Albuminuria.....	15	8	15	15	16	13
Urinary Casts.....	12	7	13	14	15	11
Trace of Glucose.....	1				1	1

## SUMMARY AND CONCLUSIONS

This is a purely clinical study of a rather limited number of cases of what is believed to be essential hypertension. Many of the factors, especially in the symptomatology, are lacking, but I believe that it shows the following interesting points:

First: In spite of the fact that practically all of these patients have been under medical supervision and treatment for a period varying approximately from two to six years, there has been no decrease in either the systolic or diastolic blood pressures. I believe that this is in accord with most of medical thought today. There is no therapeutic measure which exerts any constant beneficial influence on established cases of essential hypertension.

Second: It shows the progress of the pathology in the living patient with hypertension, in that there is (a) a constant increase in the size of the heart; (b) a constant increase in the degree of arteriosclerosis of the aorta as indicated by the accentuated aortic second sound; (c) a constant increase in sclerosis of the peripheral vessels as indicated by the increase in the palpable radial arteries.

## LUNG TUBERCULOSIS IN CHILDREN\*

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Tuberculosis in children cannot be discussed without defining the terms "childhood type tuberculosis" and "adult type tuberculosis." Childhood type tuberculosis is the term used to describe the "diffuse or focal lesions in the lungs and associated tracheobronchial lymph glands that result from a first infection of the pulmonary tissue with tubercle bacilli." Adult type tuberculosis is the result of a reinfection, either exogenous or endogenous. It usually begins at the apex and tends to spread. Characteristically, the tracheobronchial lymph nodes in adult tuberculosis remain uninvolved. Either type of infection may occur in children. The childhood type is more common; the adult type more serious.

## INCIDENCE OF TUBERCULOSIS IN CHILDREN

The incidence of tuberculosis in childhood is best obtained from the number of positive skin tests. In other words, if a group of children are given

the Mantoux tuberculin skin test, those who have been infected with the tubercle bacilli will give positive reactions. The incidence of childhood infection, as shown by this test, varies with different localities. Of several thousand Evansville high school freshmen tested during the past three years, an average of 20 per cent gave positive reactions. The Massachusetts Department of Public Health tested 200,000 children of elementary school age (with the Mantoux test) and x-rayed those with positive reactions. An analysis of their results showed that 28 per cent reacted positively to tuberculin, 3½ per cent showed signs of childhood type tuberculosis requiring observation, and 1½ per cent showed signs of childhood type tuberculosis requiring medical attention. One case of adult type of tuberculosis was found in about every 3,200 children.

Death rarely, if ever, results directly from the childhood type of *pulmonary* tuberculosis. On the other hand, the adult type of tuberculosis when it occurs in children, warrants a grave prognosis. The extent of adult type tuberculosis among children can be approximated by a study of the figures of tuberculosis deaths among children up to nineteen years of age. In evaluating these figures, it should be remembered that they refer to all kinds of tuberculosis, and that it is usually estimated that there are nine cases of sickness to each death.

During the year 1931 there were, in the United States registration area, 11,378 deaths among children up to nineteen years of age, from tuberculosis of all kinds. These were distributed as follows:

Age Group	Male	Female	Total
Under 5 .....	1,690	1,388	3,078
5- 9 .....	546	503	1,049
10-14 .....	553	943	1,496
15-19 .....	2,129	3,626	5,755
			11,378

In the State of Indiana, deaths from tuberculosis of all kinds during 1930 were distributed as follows:

Age Group	Male	Female	Total
Under 5 .....	32	44	76
5- 9 .....	18	12	30
10-14 .....	16	20	36
15-19 .....	42	90	132
			274

Note that in each of these tables the number of deaths among the age group 15-19 is much greater than those in any other age group. The fact that it is during this late adolescent period that most deaths occur, shows the need of particular attention to high school pupils in any tuberculosis prevention program.

## EPIDEMIOLOGY

The infants of tuberculous parents are not innately more susceptible to the disease, but because

\* A report from a Committee on Child Health of the Indiana Advisory Health Council, presented before the meeting of District Chairmen of Child Health in Indianapolis, October 8, 1934.



of the frequency and intimacy of their exposure the children of tuberculous parents show a high rate of infection. Tuberculosis is a contagious disease—each case comes from a previous case, and it is only by isolation of the case with positive sputum that the spread of tubercle bacilli can be halted. Droplet infection is, of course, the usual method of spread.

Tuberculosis has for a long time been considered a family disease because the numerous and prolonged contacts between members of a family offer frequent opportunities for droplet infection. But infection may come from a maid, laundress or cook, or tutor with active tuberculosis. It may come from exposure to others at school—other pupils, teacher or janitor. It may come from any infected individual with whom a child comes in contact.

Particular attention should be given to elderly people who are associated with children. Under the guise of "asthma," "weak heart," "prolonged cold," or other indefinite complaints, elderly people with positive sputum may be an unsuspected source of infection to children.

#### SIGNS AND SYMPTOMS

The symptoms and signs of childhood tuberculosis are extremely vague and inconsistent. Unlike other diseases, symptoms and signs are relegated to a position of secondary importance as an aid to diagnosis. Indeed, one must depend almost entirely on the history and laboratory findings (skin test and x-ray).

Some symptoms which might arouse a suspicion of childhood tuberculosis are persistent elevation in temperature, lassitude, loss of weight, and cough. Frequently the symptoms may be those of an acute cold. However, it has been demonstrated repeatedly and conclusively that the child without a symptom may have a frank and progressive tuberculous infection.

Physical signs in the chest are manifest as a rule only if the parenchymal involvement is of considerable size and extends close to the periphery. If the area of inflammation and consolidation is small and centrally located it may be practically impossible to elicit any physical signs. Enlarged glands in the hilum cannot be detected by physical examination. For this the x-ray is required.

About the time of puberty the signs and symptoms assume a somewhat more important position, because the adult type of tuberculosis is seen with greater frequency at this age. This type of infection may produce the same signs and symptoms in the child as in the adult. However, disease of quite advanced stage is not uncommon in a boy or girl of the teen age who appears normal, or even overweight. Advanced tuberculosis occasionally is found in the adolescent who is engaged in strenuous athletics. In many minimal and moderately advanced cases one is unable to elicit any

physical signs of disease. However, signs and symptoms are of more importance during the adolescent period than during infancy and early childhood. But still, with negative symptoms and physical findings, tuberculous infection may be present and may progress. At all periods of childhood the chief diagnostic measures are the tuberculin skin test and the x-ray.

#### DIAGNOSIS

"Where tuberculous infection is practically universal, cutaneous tuberculin reactions are of little value, but with the rapidly decreasing incidence of tuberculous infection, we have reached the time, in many parts of the world, when a good many adults are not infected. Hence the tuberculin test is of great value, particularly when it is negative." When it is positive it is a mandate for further investigation, including the interpretation of roentgenographs.

The Mantoux tuberculin test (intracutaneous tuberculin test) is recommended as the most reliable method. The dosage of old tuberculin used in making this test varies from 0.1 mgm. to 1.0 mgm. The usual initial test dose is 0.1 mgm. If there is no reaction at the end of forty-eight hours, tuberculous infection is eliminated. If there is any doubt, the test should be repeated, using 1.0 mgm. of O. T. Dilutions should be fresh.

Reports have been received of a plan to dispense tuberculin in tablet form. This development should be watched by county societies. If it proves dependable, it will eliminate present difficulties in securing freshly prepared solutions of the desired strength.

Valuable help in regard to the method and interpretation of Mantoux testing methods and interpretation of Mantoux testing can be obtained from a pamphlet, "Childhood Type of Tuberculosis—Diagnostic Aids," published by the National Tuberculosis Association and obtainable from the State Tuberculosis Association. The committee also recommends the pamphlets, "Diagnostic Standards" and "Procedure for the Discovery and Care of Tuberculous Children," obtainable from the same source.

All who react positively to the Mantoux test should be x-rayed, regardless of the presence or absence of symptoms or physical signs. This will usually show the extent of infection. Many will be found with only slight involvement or healed lesions and will need no restrictions. An occasional massive infection will be found and these children must be kept out of competitive athletics. A few will need bed rest.

Sputum examination should be made in all cases where there is expectoration.

#### A SUGGESTED CAMPAIGN PROGRAM

Much can be accomplished by a definite, scientific program for the discovery of tuberculosis

among children and for the education of the public regarding the cause of tuberculosis and the manner of its spread. Such a program demands medical leadership, and this leadership can best be given by county medical societies. It is recommended that each county society make immediate plans to provide this leadership. After outlining their program, it is suggested that the assistance of various lay organizations be obtained such as the tuberculosis association, public schools, civic clubs, parent-teacher clubs, etc. These groups invariably respond to requests for assistance in public health matters.

The program may be divided into (I) an educational division and (II) a case-finding division.

(I) The educational part may include talks, demonstrations, essay contests in schools, moving pictures on tuberculosis, poster displays, and radio talks to various groups. Pamphlets on tuberculosis may also be distributed. Much material for this educational part of the program can be obtained from local tuberculosis associations or from the State Tuberculosis Association. Through these channels, pamphlets, posters and moving pictures can be obtained. As a demonstration it is practical to have a physician perform a Mantoux test before a group of parents or other interested people. This demonstration is a valuable way of teaching the simplicity and harmlessness of the intradermal test. Although x-rays cannot be understood by lay people, the showing of a few x-rays is a fine way of arousing interest. Moving pictures showing the results of surgical treatment of tuberculosis have proved of great value in some cities.

An outline of information for teachers may be prepared. This outline would include such topics as (1) history of tuberculosis, (2) short biographical sketches of Koch and Trudeau, (3) contagiousness of tuberculosis, (4) the need of investigating all contacts with an open case of tuberculosis, (5) the Mantoux test and what it tells, (6) the x-ray and its contribution to medicine, (7) morbidity and mortality from tuberculosis over a period of years, (8) how tuberculosis germs grow and spread, (9) the nature of treatment for tuberculosis. Teachers are glad to present material on the topics listed above, but, unfortunately, many of them do not know where to find the facts on which to base their lessons. They should be supplied with a bibliography on these topics, and such statements of facts as will help to bring their information up to date. In matters of health, the physician can teach the teacher. The function of the medical society is to supply the teacher with facts and then to permit the teacher to use her professional training to present this factual material to pupils in the best possible educational manner. She is better able to adapt material to pupils' interests and abilities than is the average physician.

All the material used in this educational work should be carefully checked by representatives of the county medical society for its accuracy.

(II) There are several approaches in the case-finding program. It should be emphasized that whenever an open case of tuberculosis is found, the physician making the diagnosis immediately recommend that all contacts, particularly children in the family, be given complete examinations. In the case of children, a complete examination would include a Mantoux test and, if this is positive, an x-ray. The careful investigation of those in contact with open cases of tuberculosis is the first line of attack in case-finding. Naturally, the open case will be isolated.

There are many who come in contact with open cases of tuberculosis without knowing it. A considerable number of such people will be found among those enrolled in high schools. These folks are of particular importance in case-finding programs, because the high school age is the beginning of the period of greatest mortality from tuberculosis. The simplest and most satisfactory plan for discovering tuberculosis among this group is to give the Mantoux test routinely to all high school freshmen (as well as all contacts), and to x-ray those with positive reactions. This is a second, and extremely important, approach in tuberculosis case-finding.

Ideally, the Mantoux test should be given as part of a complete health examination by the family physician, and it is recommended that all physicians who give health examinations to high school pupils include a Mantoux test as part of the examination.

At the present time, however, the per cent of high school pupils having health examinations by their family physician is small. Consequently, it is suggested that county medical societies arrange to offer Mantoux tests, and x-rays to those who react positively, to all high school freshmen through the school organization. Tuberculosis associations, parent-teacher associations or boards of health should be asked to arrange for financing the expense of such a program. Such a program will do much to educate a community to the importance of tuberculosis as a problem of adolescence and early adulthood. It will also bring the Mantoux test and x-ray into more general use and emphasize the insidiousness of tuberculous infection. Such a program carried on for a few years should so emphasize the Mantoux test and x-ray, as diagnostic aids for pupils of high school age, that parents who are able to pay for routine health examinations will expect their physician to include these tests and will be willing to pay for such service.

In summary, a campaign program for education and case-finding would include the following:

1. Educational Presentation:
  - a. Talks, demonstrations, displays, moving pictures to as many groups of lay people as possible.
  - b. Teaching in schools about tuberculosis—what causes it, how it is spread, procedures in its control, etc. The medical so-



ciety can outline *what* should be taught, leaving it to teachers and supervisors to determine *how* and where it should be taught.

## 2. Case-Findings:

- a. Mantoux test and x-ray of positive reactors of all those in contact with a sputum positive patient as soon as possible.
- b. Routine Mantoux test and x-ray of positive reactors of all high school freshmen. (This group is selected because it is a larger group than any other class. Many drop out of school after the freshman year.)

The early discovery of a case of tuberculosis is of value to the individual with the infection, because prognosis is more favorable in those cases diagnosed early. It is also a factor in the public health, because it makes possible the isolation of the tuberculous individual, thus preventing the spread of infection to others.

## GAS GANGRENE TREATED BY ANTI-SERUM\*

### CASE REPORT

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W. H., 23 years old, white, married, laborer, was brought into the hospital on August 8, 1933, suffering from a severe crushing laceration of the medial and posterior aspects of the left leg which had been incurred while he was felling a tree. The skin over the tibia was scraped loose with the periosteum, leaving bare about eight inches of the medial and anterior aspects of the tibia. The calf muscles had been lacerated transversely and were badly bruised. The dorsalis pedis artery was intact. Under intraspinal procaine analgesia a debridement and primary repair was done, including installation of Dakin's tubes throughout the planes of injury. The wound was very dirty, many pieces of dirt, leaves, and twigs being removed from it. While the patient was still in the operating room a prophylactic dose of combined gas gangrene and tetanus antiserum was given. Dakin's solution irrigation was commenced as soon as the patient reached his room.

That evening the patient's temperature started to rise, and by the third day reached 103.5 degrees F. and showed a septic type of curve. On the third day crepitation was found just above the knee, and a diagnosis of gas-bacillus infection was made. At this time he was given a full therapeutic dose of gas-bacillus anti-serum intramuscularly. On the

fifth, seventh, and tenth days the dose was repeated, being given intravenously on these days. By the thirteenth day it became necessary to remove large portions of skin and some pieces of muscle from the anterior, medial and posterior aspects of the leg. The tissues showed typical appearances and odor of gas-bacillus infection, and the denudation was very extensive. The crepitation was highest in extent on the thigh about the fifth day, at which time it could be readily felt and heard about two thirds up the thigh. A small stab wound was made just above the knee to release an accumulation of pus.

By the twenty-eighth day recovery was sufficiently advanced that extensive skin grafting was done, with some undercutting of edges and placing of flaps. Almost all the grafts "took" well. On October 21 and November 10 subsequent skin grafting was done, each time under intraspinal analgesia. The grafts had to cover almost the entire medial and posterior aspects of the leg and were part-thickness grafts to which pressure was applied by hot water bottles partly air-filled and bandaged in place. On November 21, 1933, the patient was sent home by ambulance and subsequently dressed there, as at this time there were only small nude areas between the patches of grafted skin and these were filling in quite satisfactorily.

At the present time, over a year since the injury, the patient's use of the leg is practically complete. There is only a little residual stiffness and weakness of the leg, and it is weight-bearing and the patient does considerable working and walking, using a cane for long walks only.

Outside of the fact of complete recovery from gas-bacillus infection, there are several interesting features in this case. No radical surgery (other than repair, Dakin's tubes, and skin grafts) was done. No oxidizing agents were used, nor were there wide areas opened to admit air. The main dependence was placed on the anti-serum and apparently credit must be given to it for the recovery.

I have found so little reference in any of the sources I have examined on the subject of such use of the serum that I believe the case is interesting from that standpoint.

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## INDICATIONS FOR OPERATION IN GALL BLADDER DISEASE\*

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Since the advent of cholecystography in the diagnosis of gall bladder disease, the element of uncertainty has been largely removed.

\* Presented before the Monroe County Medical Society at Bloomington, September 18, 1934.

\* Presented before the Indianapolis Medical Society, January 30, 1934.

As a result of this discovery, the roentgenologist claims a correct diagnosis in 80 to 90% of all cases.

However, with all our clinical data, including the x-ray, the liver continues to be an organ of great mystery; for, as yet, no test has been devised to tell us how much the liver has been damaged or how well the patient will react to surgery.

The difficulties that we encounter in making our diagnoses are not in the advanced cases where the patient has a right upper quadrant pain associated with nausea and vomiting, with little or no relation to the taking of food, followed possibly by jaundice, but in the less advanced cases or in the so-called silent gall bladder.

We now know that gall bladder disease is not peculiar to middle age, as was so long believed, but is being found in very early life, as is evidenced by x-ray, by operation, by autopsy, and by carefully elicited histories of patients who date the beginning trouble back fifteen to twenty years.

This knowledge, therefore, challenges us to look more carefully into chronic digestive disturbances that are hard to explain and that resist all ordinary treatment.

The stomach, we are told, is the "biggest liar in the body." Twenty per cent of the time it is right, but what of the other eighty per cent?

Of the 80% complaining of gastric symptoms more than 20% are attributable to the gall bladder.

Having found the gall bladder to be the chief offender, what are the indications for surgery?

In answer to this question it occurred to me that a review of the work done by the general surgery staff at the Indianapolis City Hospital for a period of one year (July 1, 1932, to July 1, 1933) might give us a symptomatology deemed sufficient by one and all to warrant surgical intervention.

The records show that during this period there was a total of 79 cases with a diagnosis of gall bladder disease.

Of this number 42, or 53%, were operated.

Of the 37 unoperated cases 16 were improved under treatment and were discharged, 8 signed their own releases, 5 were considered inoperable, 2 refused operation, and 6 died—a mortality of 16.2%.

An autopsy was done on 5, thus proving correctness of diagnosis.

Of this unoperated group 26 were females and 11 were males.

The average age of the females was 43.7 years and the average age of the males was 54 years.

Of the 26 females 22, or 84.5%, had borne children.

In the 42 operated cases there were 33 females and 9 males.

The average age of the females was 43.9 years and the average age of the males was 53.7 years. Twenty-six of the females, or 78.7%, were multiparas.

In this series there were 7 deaths, a mortality of 16.6%; and in this list 5 were males.

The causes of death assigned were:

1. Carcinoma of cystic duct.
2. Cerebral hemorrhage.
3. Shock.
4. Massive collapse of lung.
5. Inoperable carcinoma of gall bladder.
6. Peritonitis.
7. Pneumonia.

In 30, or 71.4%, of the cases cholecystography was used and showed 100% efficiency.

In the non-operated cases it was used in 28, or 75%, but here no opportunity for a check-up was afforded.

In the series of operated cases stones were found in 37, or 88%.

The symptoms leading to a diagnosis are mentioned in the order of their frequency:

1. Pain along the right costal border was found in 29, or 69%.
2. Nausea and vomiting was present in 25, or 59.5%.
3. Pain in right upper quadrant radiating to right shoulder in 24, or 57%.
4. Tenderness on pressure over gall bladder in 23, or 54.7%.
5. Previous attacks in 15, or 35.7%.
6. Jaundice in 14, or 33⅓%.
7. Respiratory embarrassment in 11, or 26%.
8. Gray stools were found in 7.
9. Chronic indigestion in 6.
10. Difficulty in caring for greasy or fatty foods in 6.
11. Liver was enlarged in 5.
12. Heartburn was found in 5.
13. Bloating was complained of by 4.
14. Itching in 2.
15. Liver was tender on palpation in 1.
16. Chronic appendix in 12.

It is not to be supposed that every patient had all the above symptoms, but that each had one or more.

Since 88% had stones it easily is seen that we are dealing with chronic and advanced cases for the most part; hence the frequency of right upper abdominal pain and tenderness over gall bladder with nausea and vomiting.

Mention was made of respiratory embarrassment as a symptom. Schrage and Ivy attach great importance to this finding. The respiratory difficulty is governed by the degree of distention of the gall bladder wall and is occasioned by a mechanical obstruction of the cystic duct. In Crile's clinic this symptom is sought for routinely. The difficulty is chiefly inspiratory in type.

The ages of the men in both series averaged almost the same and it likewise applied to the women in both groups.



Note, too, in both series the large number of women who had borne children—84.5% in the non-operated and 78.7% in the operated; thus proving the contention that pregnancy and infection are the most common causes of gall bladder disease.

The statement that women have cholecystitis from two to five times as frequently as men also is proved.

The laboratory often is asked to determine the type of jaundice present in a given case and also to give us a clue to the severity of the infection.

Mentzer, in a review of 1,614 cases, found that in the majority of the acutely infected gall bladders there was a white count of over 16,000. Only in five did he find it below 10,000.

Jaundice, as an associated symptom, indicates an obstruction in the common bile duct or an inflammatory obstruction of the intra-hepatic ducts.

It must be regarded as a complicating factor in gall bladder surgery.

It is an interesting fact that the mortality rate of the males far exceeded that of the females—10 to 2.

Another fact is that peritonitis is responsible for 35% of the deaths in males, as against 13.5% in females.

Hemorrhage is more common in men. The biliary passages are situated deeper in the male.

In the female the junction of the cystic and hepatic duct lies 7.5 centimeters from the abdominal wall; whereas, in the male the distance is 11.2 centimeters.

The liver is more solidly fixed in the male and the rib spread is less.

Men are usually older when they come to operation, and as a rule they do not react favorably to shock.

The most frequent causes of death following gall bladder surgery are peritonitis and pulmonary complications.

We have enumerated the reasons for surgical intervention in advanced cases; what about the less advanced types?

Here it is possible to work out a syndrome that should help us in our diagnosis.

The patient's earliest and most constant symptoms probably will be that of indigestion.

A sensation of fullness in the stomach, an inability to digest greasy and fatty foods, gastric discomfort coming on one-half hour after eating, regurgitation of food, heartburn, nausea, and sometimes vomiting, constipation alternating with diarrhoea—all these should be investigated and a check be made with the x-ray.

By so doing many cases will be saved the end-stage pathology that we find so frequently.

Lahey states that when gall stones are discovered they should be removed, his reason being that the mortality of the gall bladder is in the liver just as the mortality of the prostate is in the kidney.

It is a well known fact that our best results from surgery come when the pathology is confined alone to the gall bladder.

Our failures to completely relieve the patient are in those cases where the pathology has extended beyond the confines of the gall bladder.

In this series there were twelve cases of chronic appendicitis associated with cholecystitis.

Larimore, at the Barnes Hospital and Washington University Medical School, made a study of the association of the two diseases and found that only 36% gave no indication of appendiceal pathology.

In the event that an operation has been decided upon and the abdomen opened, what evidence should be looked for as an indication for surgical intervention?

Any deviation in color from a normal slate blue should arouse suspicion.

The finding of adhesions about the gall bladder or a thickening of its walls indicates an inflammatory condition; the palpation of calculi is, of course, confirmatory evidence.

Enlarged lymphatic glands, especially the one at the junction of the cystic and hepatic duct, known as the sentinel gland of Lund, are significant.

Evidence of a hepatitis indicates a cholecystitis.

A round-edged liver denotes a congestion or an edema.

In some cases a scarring or fibrosis of the under surface of the liver leading up from the gall bladder may be observed.

A thickening of the head of the pancreas is taken by some to be diagnostic of gall bladder disease because of the association of cholecystitis with pancreatitis.

Further examination may reveal adhesions about the cystic duct, these tending to disturb its function.

The group of cases that we have just reviewed is far too small in number and variety to be of great benefit, for the majority of them fall into one classification, that of chronic cholecystitis and cholelithiasis.

In the remainder, three had stones in the common duct, three had gangrene, two had carcinoma, and two had hydrops.

All of these represented end-stage pathology.

We found no cases of rupture, no empyemas, and no strawberry types.

However, in comparison with much larger studied groups in hospitals of like character the mortality rate is similar.

It is not until we see these cases earlier, diagnose them earlier, and operate them earlier that we will reduce our mortality.

In most of the cases end-pathology was apparent, and this precludes complete cure.

The mortality of delay works here as in other conditions.

It has been the custom, amounting almost to a law, to consider acute cholecystitis as a nonsurgi-

cal problem and to delay surgical intervention until there should be a subsidence of the attack. While waiting a gangrene, rupture, empyema, or a spreading peritonitis may ensue.

The exact pathology in a given case can not be told always by the ablest diagnosticians. Mentzer, in his series above mentioned, states that in no case was surgical intervention too early.

In conclusion, what can we do to lower our mortality rate aside from the recognition of cases in early life?

For the patient who comes in with a ruptured gall bladder, an empyema, or a gangrene only, an early recognition and an immediate operation will suffice. Delay spells failure.

For the majority not so acutely ill a preoperative preparation with glucose to build up the glycogen reserve of the liver will, in many instances, change the patient from a poor into a good risk.

Last, but by no means the least, there should be the closest cooperation between the internist, the roentgenologist, and the surgeon in the management of all cases of gall bladder disease.

303 Hume Mansur Building.

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## INDIGENT RELIEF WORK\*

WAYNE COY  
STATE RELIEF DIRECTOR  
INDIANAPOLIS

The problem of administration of relief in any county or township or state is a huge problem. It is becoming more and more difficult as we go into another winter because we are seeing an increase in relief needs. I think, without a doubt, that it is the most serious problem that confronts any or all of us. It touches state, county, city and township governments and all of the people. We either receive relief or pay for giving it, so we all are vitally concerned.

The situation with respect to relations with the medical profession is a matter of profound interest to me. The relationships in some counties in the state are most pleasant; in others while no unpleasantness has arisen, still differences of opinion do exist. Never yet have I been unable to sit down and talk to the medical profession about this common problem. Sometimes we are unable to agree, as doubtless you within your profession are unable to agree on certain problems. So I do not see that our occasional difficulties present cause for great alarm.

I was somewhat concerned with the remarks made in a recent study prepared by the American Public Welfare Association relative to the medical relief situation. FERA bulletin No. 7, which out-

lines medical procedures, has been issued some fifteen or sixteen months. On the basis of those regulations, the APWA made a study of most of the states to see what had been done. Unfortunately, they included Indiana in the group of nine states who are unable to work out their medical plan in accordance with Bulletin No. 7, and gave as the reason for our inability to do so as rather fundamental differences between the State Medical Association and the state relief administration. The person who prepared the book for the APWA failed to understand that the Indiana State Medical Association, as such, does not speak for the medical profession as organized in various county societies. He failed to realize that each county society speaks for itself to us as regards plans for medical relief in their counties. I think the general principles of medical relief are understood and endorsed both by our administration on our part, and by your association on your part. Certain fundamental questions have arisen between county societies and the state relief administration which I want to mention.

Probably you are familiar with the situation which exists in a northern township. We offered a fee schedule some year or more ago. The schedule was not mandatory, it was a suggestion for a schedule which we thought advisable for medical relief. The medical profession in the township refused to accept the schedule. The schedule which they wished to place in effect was not acceptable to the relief administration. The Indiana State Medical Association came into the discussion as counsellor in the situation, and did work out compromise arrangements that failed of adoption because of a faction in the society in that county. The result was that we committed the heinous crime of hiring some physicians to come into the township to render aid. There is no question but that they are doing a good job, but we were unable to secure agreement with physicians of that particular community, and in order to give the people proper medical aid, we undertook the alternative of securing it for them. It was not a threat to you; it was necessary in this particular case, and I do not believe any one of you who consider the situation would find fault with us in this instance. On the other hand, in that same county, I was able to work out with Mr. Hendricks what I hope is a solution.

There are two groups of people who have secured more or less adequate medical aid or care. The one group which has resources to pay for medical care which they need; the other group, indigents who have had it provided by the trustees. In between these two groups there is a third on the verge of accepting relief who are unable to provide needed medical care for themselves, and for whom we are not in a position to provide it because they are not eligible for relief. As relief administrator I am not concerned with their problem, but I think it is a serious social problem as

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\* Presented before the Council of the Indiana State Medical Association at the meeting held October 8, 1934, in Indianapolis.



to how medical care may be given to those people, either through their own purchase or some other plan to be worked out. My problem is the giving of medical care to the indigent—those who are destitute by reason of unemployment or those destitute because of physical unfitness or whatever the reason is.

One fundamental question which arises is, "Who shall determine for whom we will pay?" When I say "we" I mean the Federal Emergency Relief Administration. Putting it another way, "Shall we permit the medical profession to give medical aid and bill us for those cases which they think should be on relief and which they think we should be paying for, or shall we determine for whom we will purchase medical aid?" To my way of thinking there is only one answer to that question: Having been given the custody and responsibility for federal funds, we must be the agency to determine their expenditure. In such determination there are, of course, some practical problems involved, especially relating to emergency calls. For instance, if a doctor receives a call at night from some patient of his whom he knows to be on relief—how is he going to reach us to find out whether we will pay for the service which he is called upon to render? On the whole, however, I think that it is sound that inasmuch as we are spending our money, we should determine who should receive medical care from the standpoint solely of whether or not we are willing to pay for it. When it comes to the question of whether a person needs medical care or not, I think that is a question for the medical profession to decide, and that there must be some understanding reached by the administration and the profession as to a procedure satisfactory to both of us for that determination.

I feel that the medical profession has a joint responsibility with the relief administration for the solution of the problem. I would be happy if the medical profession would submit to me a plan which I could approve in toto. I do not feel that it is my responsibility alone or your responsibility alone, and for that reason I hope that we will be able to get together on a program directed toward the solution of this problem.

We have in each county of the state at the present time a central accounting system. That system gives us information on each relief client as to the amount of relief of all kinds being received and the reasons why such relief need be granted. Any system for medical care which I propose is based upon the fact that we have that central accounting system.

The following notes were simply jotted down; I am not committed to them except as suggestions for discussion:

1. Adopt a fee schedule.

2. Social service worker shall determine and certify clients for whom FERA assumes financial responsibility for medical aid.

- a. Such certification shall be for a maximum service of (suggested three call's); the continuance of the certification depending upon a written report of the doctor transmitted through the relief client and/or member of his family to the social worker making the certification, or through a personal conference between the doctor and the social service worker making the certification. Responsibility for the continuance of medical aid thus becomes a joint medical and social service responsibility.
- b. Relief clients asking medical aid when, in opinion of social service worker, it is not needed. Members of State and County Medical Association and/or Societies agree to accept a contingent certification from the social service worker rendering a charge only if services are needed and reporting in all cases to the social service worker making the certification. Continuance of certification and medical aid, if needed, shall follow the procedure outlined in "a" above.
  - I. The mechanics of communications (either oral or written) between the doctor and the social service worker shall be established at the time of the acceptance of the terms of this bulletin. Inability to make adequate arrangements in this particular shall be sufficient reason for non-acceptance of a doctor offering his services otherwise in conformity with the plan.
- c. In event of disagreement between the social service division and the doctor it is provided that an appeal may be taken by either of them to an advisory committee to be composed of (1) the committee case work supervisor, (2) a doctor named by the County Medical Association, and (3) the county auditor.

#### *Mechanics of a Control System for Authorization of Medical Aid:*

This system presupposes a central relief accounting system containing records on all relief cases and showing amount of relief previously given and family record and reports of all investigations.

All authorizations for medical aid are to be issued from this central relief office to be approved by the trustee if that is the system used in the county. The steps of the procedure are as follows:

1. A general fee schedule based on figures agreed to by the State Medical Society and the Governor's Commission should be accepted by the local medical association or doctors subscribing to the agreement.
2. All rules and regulations concerning medical aid are to be printed on the back of report blanks furnished in triplicate similar to the

report blank attached, providing for all necessary information as to date of service, medicine given, number of miles traveled, patient treated, and all other items.

3. These report blanks are to be furnished to all physicians cooperating in the program and are to be used by them whenever they make a call or render a service which is to be paid by the township. The report blank is to be filled out in triplicate at the time the service is rendered and signed by the recipient. One copy is retained by the physician for his record, one copy goes to the relief office, and the other copy is filed with the claim against the township.
4. Whenever a physician wishes to make a call to be charged against the township, he should call or contact the relief office and obtain either a written purchase order or verbal authorization to make the call. A separate authorization is to be issued for each call or service rendered. When the call is received the relief records are to be checked and if the person for whom the service is to be rendered is on the relief rolls and is entitled to medical care, authorization is to be given either by a written purchase order or verbally. If authorization is verbal, a confirming purchase order signed by the investigator and the trustee, in all cases stating the agreed price, is to be mailed to the physician.
5. In every case purchase orders are to be given in advance of the rendering of the service and are to be priced. This applies to all cases except emergency cases when it is impossible to contact the central relief office at which time one call may be made or the emergency care given subject to investigation by the relief office. If the case is entitled to relief, then a confirming purchase order is to be issued, but the physician must obtain the signed report when he makes the call.
6. On operative cases and cases involving a large expenditure of money it is suggested that a report of at least two or three physicians shall certify as to the need for the treatment before the purchase order is issued, each physician serving on the committee to be paid for one call. This presupposes that the nature of the emergency is not such that life will be endangered by the delay necessary in having two or three doctors make a call and report.
7. Whenever the physician files his claim he will have a purchase order for all authorized medical service to which he will attach the individual reports of each call or service rendered which will total up to the amount of the purchase order. These individual reports carried by the doctor and filled out in tripli-

cate on each case will have all the necessary information and will show the recipient's signature. They will be priced in accordance with original authorization which has been recorded in the relief office.

8. If so desired, proper accounts may be kept of all authorization of medical service and the purchase order to cover all the service rendered by a given physician issued toward the end of the month. When the doctor files his claim he will attach to this general purchase order individual reports of all calls.
9. The second copy of these calls can be returned to the relief office in advance of the making of the general purchase order and may serve as a basis on which to issue the general purchase order, assuming of course that the records have been checked to determine whether the service has been authorized in advance of being rendered.
10. This system is flexible enough that the doctor will not be delayed in rendering proper medical care whenever the patient is on the relief rolls and entitled to relief. The doctor may make one call as an emergency even though the patient is not on relief, all future services to be subject to investigation. Operative cases and hospitalization cases should be thoroughly investigated in every case and a price agreed upon in advance of performing the operation or giving hospitalization.

If all the rules and regulations are printed on the backs of the report blanks and the doctor has subscribed to a medical aid agreement along these lines, there can be no misunderstanding as to what claims will be allowed or disallowed.

There have been frequent complaints at the state office about reducing medical bills. In most cases where reductions have been made, hospitalization has been involved, for which the FERA cannot pay. We have assumed that operations on indigents were hospital cases. Consequently, bills submitted for operations have been reduced to cover actual operation cost only. If that is in error, we have committed an error.

In one community we checked up to see whether or not medicine prescribed was used, and we found that bottle after bottle of medicine was unused in many households. We have sometimes been fooled in thinking that a patient is ill when he is not, and in thinking that he is not ill when he is. Our problem, as I see it, is to devise a plan in which financial control is closely held so that expenditures for medicine shall not become excessive.

As mentioned before, these suggestions which I have made are merely suggestions—I am not bound to a single one of them. I am bound in some manner to work out a plan whereby medical relief may be economically administered to all those who need it.



# THE JOURNAL

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NOVEMBER, 1934

## EDITORIALS

### THE INDIANAPOLIS SESSION

Is the depression over?

The eighty-fifth annual session of the Indiana State Medical Association held at Indianapolis October 9, 10 and 11, may go down in Indiana medical history as indicating that the depression has ended—a total registration of 1,814 removed the last shred of doubt, and established a record for attendance far exceeding that of any previous session.

From the standpoint of attendance, enthusiasm and of general interest, this session was the best ever held. A registration of 1,473 physicians so far exceeded expectations that registration clerks had exhausted the supply of programs, badges, and similar supplies long before the end of the second day.

The Indianapolis Medical Society members, as was to be expected, proved most genial hosts and overlooked nothing that might add to the pleasure of convention guests.

The opening day of the session, Tuesday, October ninth, followed state meeting traditions and was devoted to the more pleasurable features, 125 golfers making an assay toward winning one of the numerous prizes at the Highland Golf and Country Club. Contestants had good weather and a good time, and the championship honors were divided between Dr. C. A. Nafe, Indianapolis, and Dr. B. H. Burkhart, Tipton, who tied for first place with a gross score of 78 apiece. Dr. K. R. Ruddell, of Indianapolis, had an 84 with a fifteen handicap for low net score; Dr. Henry Nolting, Indianapolis, was second with a gross score of 95 and a handicap of twenty-five.

The trap shoot, a practically new feature of entertainment at our annual conventions, is gain-

ing favor rapidly. Dr. L. A. Ensminger, hyper-enthusiastic sportsman, had charge of that event this year, and arranged an interesting program which was carried out at the Indianapolis Gun Club. Dr. Ensminger reported a total of forty-two entries in the various events, with the high honors going to Dr. Robert J. Kemper of Indianapolis. Other trophies were won by Dr. A. S. Newell, Converse; Dr. H. K. Engleman, Georgetown; Dr. W. E. King, Indianapolis, and Dr. L. A. Ensminger.

The annual smoker was held the evening of the opening day at the Indianapolis Athletic Club. So well was this advertised and so well known is the fact that when the Indianapolis folks put on a show it is going to be a real show, that the crowd literally swamped the committee, and several hundred guests were unable to share in the entertainment program; however, the party was a great success and the officers and entertainment committee of the Indianapolis Medical Society are to be congratulated.

Wednesday morning, October tenth, saw the formal opening of the scientific programs, and again it was found that accommodations were inadequate for all who wished to attend. The Riley Room had been set up to accommodate 800, but the audience reached 1,200 before the session was completed. The address of President Padgett was received with acclaim, and the guest speakers, Drs. David MacKenzie, Isidor Ravdin, Robert A. Strong, and Emil Novak, held the attention of a vast audience. In the afternoon the members separated into the various sections where programs of unusual excellence were carried out before large, enthusiastic gatherings.

At the meeting of the Editorial Board held on Tuesday morning, plans were formulated for making THE JOURNAL bigger and better than ever, to use a circus advertising term. What we believe to be an important step is the adoption of a plan whereby students in the medical department of Indiana University may become subscribers at a nominal rate. We believe such a plan will interest these embryo-medics in State Association affairs long before they have finished their medical courses.

More than 500 guests filled the Riley Room of the Claypool Hotel for the annual banquet Wednesday evening. "Dr." Harlan Tarbell, magician par excellence, a group of harpists and Miss Eloise Spann, well known singer, provided royal entertainment. Dr. James S. McLester, president-elect of the American Medical Association, and Dr. Austin A. Hayden, of the American Medical Association, presented extremely interesting talks which were thoroughly enjoyed. There was just the right balance between the entertainment and the serious part of the program to please practically every one.

Thursday morning again was devoted to outstanding guest speakers, Drs. Lucius E. Burch,

Walter M. Simpson, Ralph A. Fenton, George R. Minot, Sir Frederick Banting, and Frank H. Lahey, and the attendance at these sessions was record-breaking. There can be no doubt that Indiana medical men are alive to good programs. We are deeply obligated to this group of men eminent in our profession for coming to us with such interesting and instructive messages.

Meetings of the House of Delegates which included two regular and one special session were unusually well attended. A tremendous amount of detailed business was carried through with dispatch and precision. The deliberations at all times showed that the delegates possessed an intimate knowledge of the problems facing the profession and were able to deal with these problems with judgment and understanding.

President-elect Walter Leach, of New Albany, addressed the House of Delegates, outlining the policies he expects to pursue during his incumbency in 1935.

Among the important steps taken was the creation of a new Section on Anesthesia; the adoption of a resolution favoring unified action with the bar association, to study the expert witness problem; upholding the American Medical Association in its work to place more stringent requirements for those who would set themselves up to practice a specialty; providing for the appointment of a committee to aid other safety agencies to formulate practical plans for reducing the menace of traffic accidents; sanctioning legislation to protect children from lye burns; cooperating in an anti-tuberculosis campaign and criticizing high hospitalization costs.

The House voted down resolutions to purchase property for a permanent state headquarters building, and to introduce legislation immediately which would enable the State Board to recognize the National Medical Board of Examiners.

Dr. R. L. Sensenich, of South Bend, was unanimously elected president for 1936. He was without opposition. Dr. A. F. Weyerbacher, of Indianapolis, was re-elected treasurer. All delegates and alternates to the American Medical Association whose terms expired were re-elected and those who will represent Indiana at the Atlantic City session in June, 1935, are: Delegates for one year: Don F. Cameron, Fort Wayne; F. S. Crockett, Lafayette; alternates, W. F. Carver, Albion, and G. D. Scott, Sullivan. Delegates for two years: H. G. Hamer, Indianapolis, and R. L. Sensenich, South Bend; alternates, W. F. Kelly, Indianapolis, and E. M. Shanklin, Hammond.

The elections of councilors for the third, sixth, ninth and twelfth districts were approved by the House of Delegates; Dr. H. C. Ragsdale, Bedford, third district; Samuel Kennedy, Shelbyville, sixth district; F. T. Romberger, Lafayette, ninth district; E. M. Van Buskirk, Fort Wayne, twelfth district. At the Council meeting on Tuesday, Dr. John Hare of Evansville presented his resignation

and the House of Delegates approved the selection of Dr. I. C. Barclay of Evansville to complete the term.

Dr. E. M. Shanklin, of Hammond, was re-elected editor of *THE JOURNAL* for 1935, and Dr. Ernest Rupel, of Indianapolis, was unanimously re-elected for a five year period to serve on the Editorial Board, these elections being made by the Council. Wayne Coy, state relief director, made an informal talk in regard to FERA problems, which is carried as an original article in this number of *THE JOURNAL*. The date of the mid-winter meeting of the Council was set for the second Sunday in January, 1935, which falls on January thirteenth.

Section officers for 1935 were elected as follows: Surgical Section—Don Cameron, Fort Wayne, chairman; W. C. Moore, Muncie, vice-chairman; George Green, South Bend, secretary. Medical Section—B. S. Cornell, Fort Wayne, chairman; A. S. Giordano, South Bend, vice-chairman; Walter L. Portteus, Franklin, secretary. Section on Ophthalmology and Otolaryngology—B. J. Larkin, Indianapolis, chairman; E. M. Shanklin, Hammond, vice-chairman; Raymond Calvert, Lafayette, re-elected secretary.

The following officers were selected for the Woman's Auxiliary: Mrs. E. D. Clark, Indianapolis, president; Mrs. Randolph Compton, Osgood, president-elect; Mrs. Marcus Ravdin, Evansville, vice-president; Mrs. E. O. Nay, Terre Haute, recording secretary; Mrs. John H. Eberwein, Indianapolis, corresponding secretary, and Mrs. Charles F. Neu, Indianapolis, treasurer.

Gary was selected as the meeting place for 1935.

The Indianapolis session this year undoubtedly was the best ever held by the Indiana State Medical Association. The Indiana medical profession is vitally alive and ready for action on any issue that needs its attention. Dr. R. L. Sensenich's discussion of the question of socialized medicine, before the House of Delegates, displayed his intimate knowledge of this intricate problem and proved most profitable to members of this body.

Last, but very far from least, was the program arranged by the Eli Lilly Company as a dedication service for their new research laboratory. An inspiring program, with Dr. Irving Langmuir of the General Electric Company, Sir Frederick Banting of Toronto, and Sir Henry Dale of London, England, as speakers, was presented preceding an inspection of the new laboratory building which to us seems to be an acme of perfection. A goodly number of our members stayed for this treat on Thursday afternoon and evening.

The 1934 Indianapolis session was completely successful, and, upon behalf of the State Association, we wish to express our appreciation to Dr. Henry Leonard, president, Dr. James McBride, secretary, Dr. John Carmack, chairman of the General Arrangements Committee, and each and every member of the Indianapolis Medical Society. It will never be forgotten by those who attended,



and, with the confidence of Dizzy Dean, we'll tell the whole world that when better conventions are held, the Indiana State Medical Association will hold them!

### MOTOR VEHICLE ACCIDENTS

The steady increase in the number of fatalities resulting from motor vehicle accidents is a matter of great concern to all physicians; as long as twenty-five years ago, when we were serving as county coroner, we were of the opinion that something should be done to stem this ever-increasing record. In the intervening years we have read hundreds of comments on the subject, we have listened to so-called authorities, we have attended scores of safety meetings, but all to no purpose. We have not been able to find the answer to the problem, and motor vehicle accidents continue to increase. We read that one or more persons were killed at the junction of this and that trunk line; that a car skidded into a ditch, killing one or more passengers; that, while driving at a high rate of speed, a tire blew out and caused one or more deaths. We read about these things; occasionally we may see the results of such accidents as we are traveling about, but it seems that we do not visualize them.

Recently in looking over the Indianapolis *Times*, our attention was directed to a reproduction of a map that had been prepared by the Indiana State Highway Commission. It was a striking thing, so much so that we requested an original copy from the commission and it was forthcoming. It was a blue print copy of one of the regular road maps, but with the difference that along the various highways were placed white dots, each dot marking the site of an automobile accident in which one or more lives had been sacrificed. Some of the major highways, notably 30, 31, 40, 41, and 52, were veritable white streaks on the map.

In the period from October 1, 1929, to July 1, 1934, there were reported to the Indiana State Highway Commission 5,546 motor vehicle accidents, resulting in a death list of 1,597. Mind you, this was the reported list; the Commission officials estimate that as many as twenty-five per cent of such accidents are not reported to that body. In addition, *no such accidents occurring in cities of more than 3,500 population are included in these figures!* We do not have at hand the death list from such accidents for the period under consideration, but it must be a staggering one, indeed. We shall not attempt to determine the causes of all these fatalities; suffice it to say that the list is most appalling and would seem to call for a remedy of some sort. An official of one of the largest motor clubs of the middle west recently stated that many such accidents were due to careless and reckless driving, to intemperance, and to physical disabilities that rendered the operator of the vehicle incompetent for the task he had set for himself.

Most cities which have more or less modern traffic ordinances seem to have gotten away from

the attempt to define "speeding," on the theory that a speed of thirty miles in one section of a city would not be considered dangerous, while a speed of twenty miles in another section would obviously be a real hazard; instead they have adopted the term "reckless driving." In the city of Hammond, for example, any sort of driving that endangers the citizens is considered to be reckless. Failure to observe stop or slow signs, a disregard for pedestrians, and a weaving in and out of heavy traffic, all attract the attention of our local officers.

As a matter of choice, we walk some four or five miles, daily; these walks are for the most part in the busier sections of the city; one of our pet diversions, when walking, is to count the traffic violations; we include license irregularities in this list. In the morning hike, less than two miles and along our busiest street, we average from twelve to fifteen in our daily count of violations; some are minor in character and a few are gross recklessness, such as a speed of fifty or more miles per hour in heavy traffic and at an hour when hundreds of school children are on the street; yet we are presumed to have a model traffic ordinance!

We spoke of incompetency among drivers; there are no doubt thousands of driving licenses issued in Indiana to individuals who have physical defects of such a nature as to render them unsafe to handle such death-dealing instruments as the modern high-speed motor car. In the matter of vision, alone, there is sufficient reason for such an indictment. We recall a patient who had a very high degree of myopia, who would not think of playing golf without his glasses; in fact he could not do so; yet this same man seldom wore his glasses when driving his car—for he stated that he could see a white ribbon in front of him and that was sufficient. This same man, by the way, not wearing his glasses, one evening walked directly into the path of a moving locomotive and was killed, yet he had a driver's license issued by the State of Indiana, given without examination of any sort. Oh, yes, we did overlook the fact that in applying for a license he had to have the affidavit of a freeholder, to the effect that said freeholder knew the applicant to be sound of limb and in good health!

We believe the 1935 legislature would do well to throw some safeguards around this matter of licensing automobile drivers; as we have said before, in writing on a similar phase of this subject, railroad authorities require their enginemen to undergo complete physical examinations every year or two, even though they are driving engines which operate on steel rails, rather than scout about, hither and thither, at the will of the driver. We do not particularly need more regulations, however, so much as we need a better degree of enforcement of the laws now in effect.

In conclusion, we make the observation that the Indiana State Highway Commission might well spend several hundred dollars in posting their blue

print of automobile fatalities in conspicuous places about the state.

### HERE'S ANOTHER ONE

A member recently wrote in to headquarters asking advice concerning an "invitation" that he had received to subscribe the sum of ten dollars for a listing in a registry of physicians who "are in a position to handle medical examinations for life insurance companies." He stated that he had answered a letter making this inquiry and in due time a call was made at his office by a representative of the "Bureau." He was told that the company was seeking the services of young physicians, but it developed that the same representative later saw an elderly physician in the same community, to whom the representation was made that the "Bureau" wanted men of experience and integrity! The inquirer, in writing to headquarters, states that "it sounds like a gyp game to me."

Secretary Hendricks got busy; he wrote the secretary of that state society in which the Bureau is located, and also to the Bureau of Medical Economics of the A.M.A. This elicited some interesting information. It seems that the organizers and owners of the soliciting bureau were at one time engaged in insurance work, of one sort or another; that they left the regular field and embarked on this new venture, that of undertaking to make a "Who's Who" list of medical men who were fitted for insurance examination. According to information on file at A.M.A. headquarters, one of the organizers is credited with the statement "that the company will render monthly service reports to insurance companies and will use a directory listing attorneys and doctors who are available for insurance companies." He further states that "the company's revenue will be drafted from the listing in the directory of doctors and attorneys and from furnishing monthly reports to clients of insurance companies." This would seem to be a get-'em-coming-and-going proposition—a sort of heads I win, tails you lose!

There is a whale of a lot of meat in this thing; lots of things over which the average doctor might well ponder, long and deeply. In the first instance we want to take our hat off to the Indiana physician who sent in the inquiry; evidently he has listened to our oft-repeated advice, taken from the Indianapolis Better Business Bureau, to "investigate before you invest." Again, the better class of insurance companies (and no physician wants to bother with any other sort) does not make its selection of examiners from a list compiled at ten dollars per; our information is that such appointments are made after first consulting the directory of the A.M.A., then a further check-up by calling for information from the State Association files, then by advice from the community in which the prospective candidate resides.

In passing, it might be of interest to you to know that very often your county society officers are called upon for specific information along this line,

and that seldom it is that insurance examiners are appointed from among the non-members.

All of this might lead to a host of observations, but we will be content to leave most of them to our readers; suffice it to say, when in doubt, investigate; call on Tom Hendricks; if he does not know the answer he will get it for you. Practice a bit of hesitation; it will save you money and embarrassment.

### THE ELECTION

THE JOURNAL comes to you just six days before you go to the polls, there to register your desires as to what group of officials shall have charge of civic and state affairs during the next two to four years; this is a privilege accorded to all Americans and one that should be used by all. We have little time for the individual who says he has not the time to vote yet manages to find plenty of time for carping criticism of our various governmental agencies.

Indiana physicians, like those of most other states, should be vitally interested in our legislative candidates; it is to these folks that we must look for a safe and sane consideration of the legislative needs of the present. More than that, it is almost a certainty that the 1935 session of the Indiana legislature will be called upon to consider one or more measures whose effect would be to bring about some phase of socialized medicine. While we do not believe such measures have any chance for success, yet it behooves us to see to it that the candidates we support are free from such social tendencies.

THE JOURNAL has been alert, since long before the primaries, and since that time has made every effort to ascertain from just what source such proposed legislation might be expected to come; to date we have had no direct information, but by linking this and that bit of information we believe we are correct in saying we may expect such legislation to be introduced in the coming session.

We should also consider national affairs. On November sixth we elect twelve members to the House of Representatives and one United States Senator; thirteen members of the next Congress will have much to consider in the way of socialized medicine, veterans' relief and all that sort of thing.

THE JOURNAL is not in politics; when the present editorial regime came into effect the editorial board members discussed the matter thoroughly and came to the conclusion that our political discussion should be limited solely to those matters directly affecting the profession; we have adhered to that policy and shall continue to do so.

The big thing is to get out and vote on November sixth. If you do not know where your legislative candidates stand, you have six days in which to get such information; you have a perfect right to make such inquiries and most candidates welcome them.

INFORM YOURSELF, THEN VOTE!



EDITORIAL NOTES

THE December JOURNAL will carry a complete roster of the members of the Indiana State Medical Association. We believe that this will serve a number of valuable purposes, among which is a possible stimulation to preserve a paid-up membership. Then, too, it will serve as a "Who's Who in Indiana Medicine," for none but the elect will appear therein.

IN keeping with a custom established several years ago, we had as our guest speaker at the annual banquet President-elect of the American Medical Association, James S. McLester of Birmingham, Alabama. Dr. McLester is a most delightful speaker and his address, "Borderline States of Nutritional Failure," was generously received by a large audience. We rather like the idea of getting in on the ground floor in the matter of "signing up" the president-elect of the American Medical Association within a few moments after the election takes place. We trust that Dr. McLester may find it possible to visit Indiana again soon.

IN the July issue of THE JOURNAL, the worldwide tendency toward leftist experimentation was discussed under the title of Guinea-Pig-O-Mania. The parallels which were drawn seemed to appear far-fetched to several readers. Such hardly could be called the case if the recent newspaper reports of Mussolini's latest activity are correct. He has decreed that every male, beginning at age eight, shall have his military career mapped and planned by the corporate state. Now Germany puts forth a new idea in regimentation. Although 39,579 students graduated from German preparatory schools this spring, only 4,700 of them are to be allowed to seek higher education, this by governmental regulation. The objective is obvious; to decrease the intellectual proletariat and to increase the workers. The National-Socialist party is the power behind the decree. Beware America!

CONSIDERABLE interest has been manifested in the ruling of the Indiana State Board of Medical Registration and Examination to the effect that anesthetics should be administered only by licensed physicians. The ruling has been upheld by the Attorney General of Indiana. In many of our hospitals it has been the practice to employ full-time anesthetists, many of whom are not physicians. In a recent contact with the Board, we learned that while the Board is not disposed to be arbitrary about the matter, a reasonable time will be given in order that arrangements may be made for the employment of physicians for this work, but after that time the law will be enforced to the letter. This once more brings up the fact that in many of our cities there are no members of the medical profession who are prepared to adopt anesthesia as a specialty. On the other hand, we are advised

by a pioneer specialist in this field that he has personally trained a rather large group of physicians who are available now. With the creation of a Section on Anesthesia in our Indiana State Medical Association, and the ruling of the Indiana State Board of Medical Registration and Examination, it would seem to be a desirable time for some of our folks seriously to consider taking up anesthesia as a specialty.

THE State Board of Medical Registration and Examination has engaged in a new work the past few weeks. Because of the great number of changes that have been made in the last ten or fifteen years, the files of the active practitioners have not been checked, and as far as is known there never has been a systematic check of the licenses. The lack of a registration law has made it impossible to keep track of the men who move about in the state. At the beginning of each year, the Board secures from the State Board of Health the names of practitioners who have died in the preceding year, and removes them from the active file. Already quite a number of changes have been found, and it is interesting to note that several practitioners are listed in the directory of the American Medical Association who never have secured a license from the State of Indiana. Such a situation might bring considerable embarrassment, as such men would be subject to prosecution for practicing without a license. The present plan is to maintain a file of the active practitioners in the state; later a list will be published for the information of the profession. Frequently physicians secure licenses by reciprocity in other states, but the Board does not know whether or not these men actually leave Indiana.

HERE is an interesting bit we found in the *New Yorker* for September 29th; it occurs to us that in too many instances there might be quite some truth in the observations of the editor of the *Talk of the Town* department of that most readable magazine:

"There is said to be a fine cure now for agranulocytosis (death of white corpuscles). There is said, also, to exist a substance in one's kidneys which, if there's enough of it, will provide immunity from cancer. The cause of leukemia in chickens has been discovered, and a serum is being developed for infantile paralysis. All these discoveries in the field of medicine give us a cheery feeling of progress; that is, they would give us a cheery feeling of progress if we thought any corresponding improvement was noticeable in the field of diagnosis—or what we call "going to the doctor." After all, the remedy for agranulocytosis is useful only if one's physician manages to discover, by showing a little interest, that you have agranulocytosis. Yet any adult knows that going to the doctor is still pretty much where it was: the doctor mulls over his records, places a wooden paddle on your tongue, and makes a dirty crack about your tonsils. And there are always just enough

patients who feel bad but *haven't* got agranulocytosis, so that he gets away with it."

SOME months ago a physician from an eastern state submitted an unsolicited paper for publication in THE JOURNAL which was returned, for various reasons, among them being the fact that the paper recommended the use of a local anesthetic which had not been approved by the A. M. A. Council on Pharmacy and Chemistry. The paper was very well written and covered a timely subject, and under ordinary circumstances we would have been very glad to use it. We had completely forgotten the incident until very recently, at the secretaries-editors conference in Chicago, when the editor of the *Delaware State Medical Journal*, in talking about "Some Problems of a State Medical Editor," stated that he had been greatly embarrassed to find that he had accepted this paper and that it also appeared in the current issue of the West Virginia official organ. An editor from another section of the country stated that he, too, had received a copy of the paper but had refused publication. It was apparent that the author had broadcast his message in the hope that it would be published some place or other. Since that time we have been looking over advertising matter sent out by the firm producing the recommended anesthetic, thinking we might find some reference to the "boost" given by this author, for the manufacturers of such products rarely overlook such an opportunity.

MEDICAL TIMES, dealer in provocative editorial topics regarding the profession, asks, with a strong implication of an affirmative answer, if unorthodox medical individualism does not serve a useful purpose.

We will be explicit. Undoubtedly it does, though the unorthodox individualist, unless he is shrewd and keeps the right professional company, is likely to be ostracized and acquire a heavy incrustation of false rumor.

"Take, for example," says *Medical Times*, "James Graham, the noted charlatan of the eighteenth century—Edinburgh trained—who in America and England outraged the medical profession by forbidding the unfit to marry; by favoring early sterilization of every type of degenerate or the marriage of such degenerates to superannuated maids or old, dilettante women; by suggesting a special tax on spinsters who had rejected proposals of marriage and a similar tax on bachelors; by proposing that Parliament enact triennial or septennial jubilees or matrimonial insolvent acts for the relief of wretched, discordant and barren couples; by urging a better balanced dietary—less beef and more vegetables; by advising the continuous tepid bath and music in the treatment of the insane."

For the 1700's Dr. James Graham certainly was a modern. He foresaw the future and apparently helped create it and went far beyond the present.

But if some good member of the Indiana State Medical Association got out and stumped the city

for ideas as advanced now as they were then, the eyebrows of most of his co-fellows in those institutions would get weary raising themselves in questioning or disapproval.

The world might be a more diverting and a physically safer and happier place ultimately to live in if individualists in medicine were encouraged.—*Indianapolis Times*, September 29, 1934.

At the time of the convention in Indianapolis, October 11th, the Executive Committee prepared, and the general session heartily approved the following telegram which was sent to President Roosevelt:

HON. FRANKLIN D. ROOSEVELT  
PRESIDENT OF THE UNITED STATES  
WASHINGTON, D. C.

THE INDIANA STATE MEDICAL ASSOCIATION NOW IN ANNUAL SESSION HEREBY RESPECTFULLY SUGGESTS THAT THE COMMISSION RECENTLY APPOINTED BY YOU TO STUDY THE QUESTION OF ECONOMIC SECURITY OF THE AMERICAN PEOPLE CONSULT WITH AND CALL UPON THE ORGANIZED MEDICAL PROFESSION OF THIS COUNTRY FOR FACTS AND FIGURES THAT THE AMERICAN MEDICAL ASSOCIATION HAS NOW IN ITS POSSESSION, IF AND WHEN THE COMMISSION CONSIDERS THE QUESTION OF SICKNESS IN RELATION TO THE GENERAL PROBLEM OF ECONOMIC SECURITY OF THE AMERICAN PEOPLE.

EXECUTIVE COMMITTEE,  
E. E. PADGETT, M. D., PRESIDENT,  
INDIANA STATE MEDICAL ASSOCIATION  
THOMAS A. HENDRICKS,  
EXECUTIVE SECRETARY.

A speedy reply was received, addressed to Dr. Padgett and signed by Louis McH. Howe, secretary to the President, as follows:

"The President has received the telegram signed by yourself and Mr. Thomas A. Hendricks on behalf of the Indiana State Medical Association, and has asked me to assure you of his appreciation of your courtesy in sending your suggestion to him. By his direction I am referring your wire for the consideration of the Secretary of Labor who is Chairman of the Committee on Economic Security."

Within a few days, Dr. Padgett received the following letter from the director of the committee:

Dear Dr. Padgett:

President Roosevelt has asked us to give you information in response to the telegram which you sent to the President relating to the work of this committee and the subject of a consultation with the organized medical profession.

Complying with this instruction allow us to say that we have already advised the American Medical Association that we will be very glad to avail ourselves of the facilities of the Association which have been generously offered to us and also to receive any suggestions which the Association or its officers may desire to make relating to any phase of the work of this committee.

Appreciating the interest of your Association in our work, we are

Sincerely yours,  
COMMITTEE ON ECONOMIC SECURITY,  
(Signed) Edwin E. Witte, Executive Director.



## CONVENTION NOTES

GARY, 1935!

Registration totaled 1,814. A goal for future sessions to reach!

President Padgett, ever solicitous for the comfort and convenience of his "guests," made the rounds to see that all conveniences were at hand for the various sections.

We want to thank Captain Johnson of the Indianapolis police for his courtesy in providing a police escort for the women who attended the Foster Hall program on Tuesday.

We wish to thank Dr. Verne Harvey, state health director, for his splendid help and cooperation throughout the meeting, particularly in supplying lanterns and men to operate them.

The Indianapolis Convention Bureau deserves our thanks for their efforts in making our convention a successful one. The girls who worked at the registration desk were efficient and unfailingly courteous.

Mr. Homer Sanger, of the American Medical Association, who assisted with Mr. Hull's exhibit, deserves the appreciation of our members for their enlightening exhibits. As usual, they were interesting and informative.

THE JOURNAL is mightily pleased with the reelection of Dr. Rupel to the Editorial Board. "Rupe" has been of invaluable assistance to us, and we are glad to have the assurance that he will be with us for some time to come.

That we missed the genial and irrepressible smile of that valiant warrior for "the rights of medicine," Joe Weinstein, goes without saying. However, he came through with a wire from California that saved the day.

An unusual feature of the musical program of the annual banquet was the appearance of the Montani Harp Sextette which made quite a hit because of the fact that their musical offerings were limited entirely to old favorites.

Among those present at the annual smoker and get-together was the voluble George Daniels of Marion. George surely does enjoy these annual affairs, and when it comes to directing the post-formal entertainment program, he has no equal!

Immediately upon his return from the convention, Shanklin sallied forth upon the "sun-kissed, azure-blue waters of Lake Michigan" in quest of a mess of Wisconsin fir-pine-and-balsam-laden zephyrs he had inadvertently left stranded, somewhere between Milwaukee and Gary.

No report of the 1934 session would be complete without a statement in regard to the splendid scientific exhibits. Although they cannot be mentioned individually, each of the organizations and individuals who gave the time and effort to make this exhibit an outstanding feature is congratulated, and Dr. Ernest Rupel and Dr. C. G. Culbertson, who were in charge of this work, are sincerely thanked. Special attention is here called to the exhibit under the direction of the Bureau of Publicity and the Historian, Dr. Leon G. Zerfas, of pictures of the ninety past presidents of the State Association. These will be placed permanently in the headquarters of the State Association.

One of those "smiles that won't come off" was being worn by Dr. Floyd T. Romberger of Lafayette, shortly after the second meeting of the House of Delegates. Romberger has for some time been interested in the creation of a Section on Anesthesia; he has had this in mind for a long time, but had never before presented a resolution therefor to the House. This resolution, it might be noted in passing, was prepared and presented in the customary Romberger style, which means that it was written only after a thorough search of *Roget's Thesaurus*, plus a microscopic analysis of *Allyn's Synonyms and Antonyms*; in other words, it was the last word in resolutions. So, when the House concurred in, or with, the petition "Rommy" presented, he assumed the aforementioned smile!

Pitman-Moore Company conducted a contest for physicians and student physicians at their exhibit booth, and more than two hundred physicians entered their guesses on the number of bacteria contained in a jar of concentrate on display. The jar contained 750 cc.'s of B. Friedlander concentrate with 66.4 billion organisms per cc., or a total of 49,800 billion bacteria. Drs. B. V. Klain, Indianapolis; Earl H. Mitchell, Indianapolis, and W. C. Winstandley, New Albany, each guessed 50,000 billions, and each was presented with a filled bacterial vaccine case. In a bacterial identification contest for students, prizes were won by B. V. Scheib (\$25); J. L. Browning (\$15); L. W. Spalvar, S. E. Bechtold and L. F. Beggs tied for third place, and each was awarded the third prize of \$5. All are juniors or seniors in the Indiana University School of Medicine.

Registration of attending members and guests was expertly handled by a group of young women headed by headquarters staff. We are inclined to be a bit hyper-enthusiastic about this staff of ours; we have a very definite notion that no other state can compare with Indiana in this regard.

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The scientific exhibit grows better each year, and has come to be an important part of our annual gatherings. As we were looking it over, we wondered what our late friend, Dr. Frank B. Wynn, the father of such exhibits, might think were he permitted to wander through a modern scientific exhibit.

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The commercial exhibits were better arranged than usual, and the various exhibitors reported an unusual interest in their products. We would urge our members to keep in mind the folks who exhibit at our annual conventions; they make it possible for us to do things on a far greater scale than would otherwise be possible.

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Visitors to the convention from other medical associations included Dr. Harold M. Camp, secretary of the Illinois State Medical Society, Dr. C. O. Burgess, from Illinois; Dr. Burton Corbus, acting secretary of the Michigan State Medical Society; Mr. E. H. Bartelsmeyer, assistant secretary of the Missouri State Medical Association; and Dr. Olin West, secretary of the American Medical Association.

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One of the highlights of the convention was the presentation of the problem of socialized medicine by Dr. R. L. Sensenich of South Bend; it was as clever a portrayal of a subject as we have ever heard and his listeners, the House of Delegates in executive session, missed not one word. As President Padgett expressed it, "There is no man in America who has a better knowledge of this subject than Dr. Sensenich."

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The elevation of Dr. R. L. Sensenich, of South Bend, to the office of president-elect of our Association, comes as a well merited recognition of his work in the House of Delegates of the American Medical Association during the past few years. Dr. Sensenich received a double honor at the hands of the Indiana House of Delegates, in that he was re-elected as a delegate to the American Medical Association for a period of two years.

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One of the interesting exhibits was that of THE JOURNAL, prepared by Miss Toman. The observer was enabled to see just by what process the official organ gets to the member's desk; original copy, proofs and all that goes to make up the complete

publication were cleverly displayed. A striking picture of the late Doctor Bulson, who may be said to be the founder of THE JOURNAL and was its editor for twenty-five years, was prominently displayed.

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The second session of the House of Delegates came near to being a "flop," so far as George Miller was concerned. However, he managed to bat fifty-fifty for the morning. He got in his customary long-meter roll call, but ingloriously failed with his blackboard and crayons; not once did he have opportunity to use these, with his one-two-three-four tally which has long since come to be an important ceremony in our elections, for all elections this year were of the unanimous sort.

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One of the problems of headquarters office in the near future will be the proper display of the pictures of the former presidents of the Association. Dr. L. G. Zervas has collected the photographs of all of our past presidents, with the single exception of Dr. David Hutchinson, of Mooresville, who served as president in 1860. He has had them copied in uniform style and size, and they most certainly are a valuable addition to the records of the Indiana State Medical Association. Just how these will be displayed at headquarters is, as we have said, a problem.

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The exhibit prepared and arranged by Dr. Edgar F. Kiser, covering the early history of medicine, is to be greatly commended. It showed an enormous amount of work in delving into the past, and resulted in a display that attracted the attention of the entire profession. Among the many old editions presented in his exhibit was a copy of the first medical book published in Indiana. It was conservatively estimated that some nine hundred persons viewed his exhibit. Dr. Kiser is to be congratulated on the work he has done, and we trust that he will be among our exhibitors for many years to come.

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Brigadier-General William K. Naylor's talk on "Manchuria" provided a "high spot" in the convention for those who heard him speak at the Veterans' luncheon. His listeners felt that he displayed a masterful understanding of the situation. General Naylor explained that Manchuria never really was claimed by the Chinese as a part of China. He said that under the Japanese, there has been extensive development of the railway system with equipment purchased from the United States, until Manchuria is practically modernized from the standpoint of transportation. General Naylor is commanding officer at Fort Benjamin Harrison.



## THE PRESIDENT'S PAGE

*To every member of organized medicine in Indiana:* First of all we wish to thank you in all sincerity for your hearty cooperation which made our eighty-fifth annual meeting, just ended, the largest and best in the history of the Indiana State Medical Association.

Now that that is over and chalked up on the right side of the ledger, we ask you to turn your attention in extreme earnestness to the next stop, which occurs on November 6, 1934. This event, the coming election, I assure you has possibilities either dire in their results, if misdirected, or helpful to every one of us if started in the right direction. Remember that there are more than 150,000 of us in this country, and that we at some time contact every member of society with few exceptions. Remember that we are prepared to advise them in the best course to pursue, and remember further that the public expects you to be a leader. It looks to you for advice, and in the present uncertain condition of things medical in this country, it is high time that we assumed our rightful place of leadership. If you have a feeling that mixing in politics lowers the dignity of your profession, please get rid of such feeling. It is always ethical to fight for your life. It is up to us as a profession to protect our rights, and it can and will be done without once violating our Principles of Ethics. The politician and the others who seek advantages for themselves at the expense of the medical profession do not care for our dignity. A word from you as their doctor will aid many of your patients to understand our point of view, and to vote accordingly.

It is very pertinent that we keep in mind our cousins in practice, and our brothers in danger. According to a recent editorial in the *Illinois Medical Journal*, there are 50,000 dentists and about 180,000 druggists in this country, not to mention an army of graduate nurses and hospital executives. Further, this editorial remarks, "These professions, if properly organized and directed and working cohesively, can be made the greatest factor for good in the country. No legislation inimical to the best interests of the public and the professions named could be placed on the statute books with this organization working coherently."

Do not fail to contact the candidates both directly and indirectly. There is no one in America who believes that we, the members of the medical profession, and our allied co-workers are entirely without character. They do not expect us supinely to submit to being ground into servants that are near slaves without protest, and the place to make your protest most keenly felt is with those who aspire to places in our law-making bodies.

See your candidates, of whatever faith, and put the issues directly up to them.

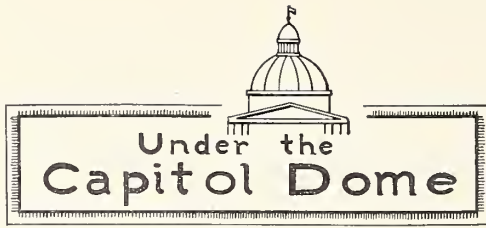
Again in the *Illinois Medical Journal* we get the following suggestive questions: "Is the man who is asking for your vote in favor of government medicine, government banking, government meddling, government regimentation under a bureaucracy, or for a minimum of government in business, with individual opportunity and freedom from tyrannical rule by governments, departments, and bureaus? Is he for confiscation by taxation, redistribution by demagogues, or for an opportunity for everybody and anybody to accumulate honestly and without special privilege, to work for themselves as well as for the politician and the tax-gatherer? Is he for free speech and free criticism of public officials whose acts in his opinion call for criticism? These questions are American, not partisan. They must be considered and decided by Democrats and Republicans alike."

Explain to your candidates and his voting constituents that every physician is not only an individual, he is a separate institution, that his success depends entirely and inherently on his own initiative and resourcefulness, and that if he is a failure, the public will soon put him in his rightful place. How much better than to have him forced on to an unwilling public by some uninformed bureau or some unscrupulous politician. Ask your candidates and the voting public, "What will it profit the politicians at Washington who are juggling the destiny of the medical profession into regimentation and making of us all mere pawns of national government dictation?" Who will be the loser in the long run? The sick public, of course, for you cannot stifle individualism in the doctor without lowering the class of service he renders.

Whenever the practice of medicine in America is threatened, and it is very definitely threatened now, your place is in the front line trenches. If those trenches pass through the mass of political machinations, your place is there nevertheless. We have lain supine and been kicked in the face far too often now. It is time we were heard. In America, the best place to be heard and to have your influence felt is at the polls. Your candidates know your strength. Do not let it pass unnoticed.

May every physician in Indiana take his place in public thinking. May he assert his leadership. See the candidates in your community now. Find out how they stand on things medical, but also let them know how you stand; then vote accordingly.

*E. E. Padgett.*



Indiana licenses of two doctors were revoked during the past month by the State Board of Medical Registration and Examination. The doctors were William Hanlin Curtiss, formerly of Indiana and more recently practicing in California, and Ralph K. Brown, of New Albany. Dr. Brown recently was sentenced to a prison term at Fort Leavenworth for alleged violation of the Harrison narcotic act. Action of the Indiana Board in connection with Dr. Curtiss followed similar action by the California Board. Dr. Curtiss also was convicted of alleged violation of the drug act.

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An increase of nearly eight per cent in fatalities from automobile accidents in Indiana during the first seven months of 1934 as compared with the same period last year has been reported by James D. Adams, chairman of the highway commission. There were 582 fatalities during the period this year and 539 during the corresponding period last year.

\* \* \*

Despite the alarming gain in Indiana, however, the increase was much less than the average in a group of forty states, the average increase being twenty per cent, according to Mr. Adams.

Highway commission officials said that Indiana's smaller increase in the number of fatalities was probably due to the commission's extensive safety program which included elimination of traffic hazards and the widening of shoulders along the pavement of more than 1,000 miles of highways.

\* \* \*

A survey of Indiana's public schools will be started immediately to determine how best to meet the problem presented by children who have physical handicaps which retard their progress.

According to Floyd I. McMurray, state superintendent of public instruction, the survey will be conducted by the Indiana University psychological center of Riley Hospital, and will be under the supervision of Mrs. Emily C. Halls, teacher of speech correction.

Teachers will be asked to fill out blanks where they find students who stutter, lisp, have nasal voice, cleft palate, infantile or baby talk, delayed or slovenly speech, or sensory defects such as vision and hearing.

Results of the investigation will be used to help map out a program of training teachers to meet the problem presented by these children, Mr. McMurray said.

Speakers for medical associations or other groups in which Indiana doctors are interested may be obtained from the state department of conservation's educational division, Virgil M. Simmons, conservation commissioner, has announced. Demands for the speakers, who discuss conservation problems and show motion pictures on activities of the department, are in increasing demand, Mr. Simmons said. This interest in conservation is not confined to any one group as requests for speakers come from conservation clubs, schools, luncheon clubs, service clubs, civic organizations, women's clubs, and other groups. To fill these requests it is necessary that arrangements for a speaker be made at least two weeks in advance with the department of conservation. This permits the routing of members of the educational division and makes possible their appearance before a greater number of groups. There is no charge for their services or the films which demonstrate various activities of the department.

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Sale of 1935 automobile license plates is expected to begin early in December and it is expected that the license department will require all motor vehicles to have their new plates by January first.

The license department this year is beginning a new system of applying for and receiving plates which is expected to eliminate the necessity of standing in long lines to purchase the plates. Under the new plan each automobile owner who had 1934 Indiana plates will receive an application by mail, completely filled out even to the cost of the plates. The owner will sign this card and send it back with the license fee and the plates then will be sent to him, or the motorist may present the application to the license bureau and receive the plates promptly.

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J. L. Axby, state veterinarian, has announced that the testing of cattle for Bang's disease will be extended from Marion County, where it was started recently, as soon as enough cattle owners sign agreements necessary. Testing of cattle for this disease is being done under terms of a federal law which appropriated funds to pay the actual cost and an indemnity to farmers. Tests are made for the purpose of clearing herds of the disease, but it is purely voluntary on the part of farmers.

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Philip Lutz, Jr., attorney general, has sent Dr. Verne K. Harvey, director of the State Division of Public Health, an official opinion which holds that the health department has no legal authority to require dealers in Vitamin D milk to submit monthly samples to an approved laboratory for analysis. The proposed rule would have been issued to determine whether the product contained a sufficient amount of Vitamin D to cause the satisfactory healing of rickets.



Laws concerning the state health department give the department "express authority to enact rules and regulations necessary to enforce the act (the pure food and drug law), but this power, as broadly as it is stated, I think must necessarily yield to some limitations," the attorney general wrote in his opinion. "In other words, the board is primarily an administrative board without legislative power in the ordinary sense of the term."

The attorney general explained that the opinion was written without taking into consideration the possibility of local municipal regulations by cities under their authority to require the inspection of foods and to regulate the sale thereof, by which "the objective indicated in your letter might be thus realized."

"In closing, however," the attorney general wrote, "I desire to point out that the board does not have the power to establish minimum standards for foods which would include Vitamin D milk." The board has a right to establish a regulation setting out the Vitamin D potency required for sale of the product within the state, "and the labeling or branding of milk as Vitamin D milk which has a less potency than that fixed by the board would constitute a violation of the misbranding section of the pure food act," the attorney general said.

Sept. Total for			Sept. Total for		
County	1934	1934	County	1934	1934
Allen .....	0	6	Lawrence .....	0	5
Bartholomew ...	1	2	Marion .....	4	9
Delaware .....	0	1	Martin .....	0	1
Blackford .....	0	1	Montgomery ....	0	1
Crawford .....	1	1	Perry .....	0	4
Decatur .....	1	1	Randolph .....	0	1
Dubois .....	0	2	Shelby .....	2	2
Fayette .....	0	1	Spencer .....	0	2
Gibson .....	0	1	Rush .....	1	1
Grant .....	0	2	Warrick .....	0	1
Greene .....	0	2	Vanderburgh ...	0	3
Harrison .....	0	1	Vermillion .....	0	1
Jackson .....	1	3	Wayne .....	0	2
Knox .....	0	2			
Lake .....	0	2	Total .....	11	61

SECRETARIES' COLUMN

It was splendid to see so many secretaries at the State meeting, which was the largest and best of any ever held.

Don't forget that in January, 1935, we will have another secretaries' conference in Indianapolis. I hope for this meeting to be the best of all. The tentative date is January 20, 1935. If you have any suggestions for this meeting, please let the committee know before November 15, 1934.

There has been a statement made that there was a definite connection between the Borden Company and the Milbank Memorial Fund. I have made a personal investigation of this matter, and I can say that there is no connection between the two organizations.

There has been a man around representing the National Auto Underwriters Corporation and the National Auto Club. He is selling an insurance policy to the physicians that gives roadside, hospital, ambulance, and medical service. If a doctor takes one of these policies, he will be given the business that results from these accidents. Think hard before you buy.

On November 6, 1934, there will be an election. Be sure that you vote for the legislators, congressmen and senator that are favorable to the public welfare and the medical profession.

By the first of the year we hope to have something interesting and educational for your county society meetings.

A. M. MITCHELL, M. D., *Chairman.*

DIPHTHERIA REPORT, SEPTEMBER 1934

We regret very much to report that the month of September, 1934, showed eleven deaths from diphtheria. This brings the total number of deaths for the first nine months of the year to sixty-one. Again we must call the attention of the profession to the fact that the last three months of the year are the ones which show high mortality rates for this disease. *This is the time of the year for the profession to be on the lookout.*

It is interesting to note that of the eleven deaths reported one was a person seventy-three years old, one was fifty-two years of age, one was twenty-three, and another was twenty-two. We frequently hear the remark that diphtheria is invading the older age groups. Of the remaining seven cases only two were of school age.

Marion County had four deaths—a most unsatisfactory month. Shelby County reported two deaths, both occurring in the same family. Crawford, Dekalb, Shelby, and Rush counties entered the black list for the first time.

Following will be found the total number of cases by counties for the month of August, along with a record of the number of cases for the first eight months of the year:

## VOICE OF THE DOCTOR

To the Editor:

The Executive Committee of the Indiana Tuberculosis Association has requested me to extend its appreciation of the complimentary references made to the tuberculosis associations in the state in the editorial which appeared in the September issue of *THE JOURNAL* of the Indiana State Medical Association. The writer of the editorial was, I am sure, familiar with the history of the organized tuberculosis movement in this country which I shall give briefly:

The American Medical Association in 1903 appointed a committee to form a national organization composed of doctors and the laity, for the purpose of spreading information relative to the causes, prevention and control of tuberculosis. The thought behind this resolution was that tuberculosis to be effectively controlled must be a campaign of education and that responsible lay people in each community could conduct such program among the laity, assisting the physicians thereby in carrying on a more effective program of treatment.

The committee of the American Medical Association met in 1904 and proposed the establishment of a National Association for the Study and Prevention of Tuberculosis, which name has since been changed to the National Tuberculosis Association. This association opened its doors January, 1905, the first executive secretary being Dr. Livingston Farland, now president of Cornell University. The movement has grown greatly, and there are now more than 2,000 local associations in this country.

The tuberculosis associations, being made up of both medical men and lay people, have been fully conscious of the importance and need of medical direction and cooperation. In this state we have always urged such union of medical and lay forces. That the medical profession plays a large part in the work of our tuberculosis associations may be judged from the fact that considerably more than half of the county tuberculosis associations have members of the medical profession either among their officers or on their boards of directors. In twenty-six of the county tuberculosis associations the president is a doctor. As a further indication of medical participation, may I say that on the Executive Committee of the State Tuberculosis Association, which is composed of twelve members, will be found eight members of the medical profession. With this preponderance of doctors certainly the State Association can hardly be termed strictly a lay organization. Our associations have funds for the carrying out of their activities, and we feel it is really a help to the medical profession in making people health conscious and causing them to recognize the value of going to the doctor at more frequent intervals. We feel, too, that there is no question but that the lay interest which has

been stimulated has been responsible in large part for health progress.

Our interest in the medical phases of the tuberculosis problem is evidenced in the short courses we give each year to the members of the medical profession and to the tuberculin testing which has already been carried out in a number of the schools in this state. We seek doctor participation and hope that everyone of our associations will have one or more doctors as active members. We want the closest possible cooperation between the medical profession and the tuberculosis association, which after all is not a lay organization but a medico-lay organization. Unfortunately sometimes some individual may occasionally give expression to some unsound statement, but the Tuberculosis Association cannot control such individual any more than the State Medical Association can be held responsible for an assertion by any individual doctor.

Our State Association has enjoyed splendid cooperation with the State Medical Association. We are appreciative of this and want it to continue. A fuller understanding of the aims, purposes, and work of the tuberculosis association will, I am sure, effect a closer union with the medical groups and bring about that cooperative working relationship which is most important and necessary for best results.

Very truly yours,

M. H. DRAPER, M. D.,  
*President.*

MURRAY A. AUERBACH,  
*Executive Secretary.*

## DEATH NOTICES

E. E. POLK, M. D., Muncie, died October twelfth, aged seventy years. Dr. Polk graduated from the Physio-Medical College of Indiana in 1886.

U. H. FARR, M. D., of Paragon, died October second, aged eighty-eight years. Dr. Farr graduated from the Indiana Medical College, Indianapolis, in 1877.

FRANK SONGER, M. D., of Hillsboro, died September twenty-third, aged sixty-eight years. Dr. Songer was a graduate of the Medical College of Indiana, Indianapolis, in 1891.

JOSEPHUS MYERS, M. D., of Alton, died September twelfth, aged eighty-three years. He had practiced in Alton for a period of forty-six years. Dr. Myers graduated from the Kentucky School of Medicine, Louisville, in 1877.



DAVIS L. FIELD, M. D., of Jeffersonville, died September nineteenth, aged ninety years. Dr. Field graduated from the Medical Department of the University of Louisville in 1868. He had retired from active practice several years ago.

THOMAS M. STALEY, M. D., of Bicknell, died September twenty-eighth, aged fifty-six years. Dr. Staley was a member of the Knox County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association. He graduated from the Baltimore Medical College in 1903.

FRANK E. WOLFE, M. D., New Albany, died September twenty-first, aged fifty-eight years. Dr. Wolfe was a member of the Floyd County Medical Society, the Indiana State Medical Association, and the American Medical Association. He graduated from the Kentucky School of Medicine, Louisville, in 1897.

BERNARD M. TURBOW, M. D., East Chicago, died October second, aged forty-seven years. Dr. Turbow was a member of the Lake County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Chicago College of Medicine and Surgery in 1913.

EARLE S. GREEN, M. D., of Muncie, died October eleventh, aged fifty-one years. Dr. Green was a World War veteran and attained the rank of lieutenant-colonel during that service. He was a member of the Delaware-Blackford County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the Indiana Medical College, School of Medicine of Purdue University, Indianapolis, in 1907.

FRANK G. JACKSON, M. D., of Muncie, died October sixth, aged seventy-six years. Dr. Jackson once served as city health commissioner for Muncie, and distinguished himself in his community through his work during a smallpox epidemic in 1893. He was a member of the Delaware-Blackford County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the Louisville Medical College, Kentucky, in 1894.



## HOOSIER NOTES

DR. A. M. BAKER has located in Salem for the practice of medicine.

DR. GEORGE S. SILLIMAN, formerly of Millersburg, has opened an office at Monroe.

DR. L. P. CASPER has moved from Louisville, Kentucky, to Jasper, Indiana, where he will practice medicine.

DR. FRANK E. SAYERS, of Terre Haute, spent a month doing postgraduate work at the Harvard Medical School.

DR. ROBERT R. MORGAN has moved from Bloomington to Waveland, where he will conduct a general practice.

MISS MARY ELIZABETH MATTHEWS, of Indianapolis, and Dr. Philip Yunker, of Evansville, were married October ninth.

MISS ELWANDA PHILLIPS, of Dunkirk, and Dr. M. F. Poland, of Indianapolis, were married in Indianapolis October seventh.

DR. ARNOLD L. LIEBERMAN, of Gary, read a paper on "The History of Medicine" before the Y.M.C.A. Discussion Club in Gary, October ninth.

DR. RUSSELL B. ENGLE, formerly of Winchester, has located in Farmland, taking the place of Dr. Charles Botkin who recently moved to Muncie.

DR. CHARLES P. EMERSON, Indianapolis, addressed the members of the Darke County (Ohio) Medical Society at Greenville, Ohio, September twenty-first.

DR. J. W. RINEHART, who has been located at Plainview, Texas, for several years, will open an office in Flora, Indiana, where he will practice medicine.

DR. HERBERT WALKER, of Wellesley Hills, Massachusetts, has been appointed to succeed Dr. C. C. Wilson as director of health and physical education in the Evansville public schools.

THE library of the Methodist Episcopal Hospital in Indianapolis has been presented with medical books for its ear, nose and throat division by Drs. H. O. VanOsdol, C. H. McCaskey, David Beery and Lillian Mueller.

DR. KARL MENNINGER, of Topeka, Kansas, was the principal speaker at the October fifth meeting of the Terre Haute Academy of Medicine. His subject was "Limitations in the Therapeutic Application of Psychoanalysis."

DR. MAX A. BAHR, Indianapolis, superintendent of the Central State Hospital, was made president of the Indiana State Conference on Social Work at the annual meeting in Indianapolis, October first. He succeeds Mrs. Edmund B. Ball, Muncie.

DR. E. I. WOODEN, Rush County's oldest practicing physician, on September twenty-second celebrated thirty years of occupancy in the same office in the I. O. O. F. building, in Rushville. Dr. Wooden celebrated his fortieth year of practice in Rushville, August ninth.

PEDIATRICIANS of Indiana organized at a meeting held October tenth, and elected officers for the coming year as follows: President, Dr. L. H. Segar, Indianapolis; vice-president, Dr. R. A. Craig, Kokomo; secretary-treasurer, Dr. Matthew Winters, Indianapolis.

THE Radiological Society of North America will hold its next annual meeting at Memphis, Tennessee, December 3-7, with headquarters at the Hotel Peabody. Further information may be obtained by addressing the secretary, Dr. Donald S. Childs, 607 Medical Arts Building, Syracuse, New York.

OFFICERS for the Indiana Laboratory Association were elected at the meeting in Indianapolis, October tenth, as follows: president, Dr. H. M. Banks, Indianapolis; vice-president, Dr. Marcus Lyon, South Bend; secretary-treasurer, Dr. H. K. Langdon, Indianapolis; and Dr. B. W. Rhamy, Fort Wayne, as past president became a member of the Executive Committee.

THE Indiana University School of Medicine has received gifts of medical books and magazines for its medical library from Dr. Guy W. Seaton, of Indianapolis. The donation included sixty-seven volumes of medical works, twenty-seven volumes of the *Journal of the American Medical Association*, several volumes of our own State JOURNAL, and other medical journals.

THE fifty-second semi-annual meeting of the Eleventh Indiana Councilor District Medical Association was held at Logansport, October seventeenth, with headquarters at the Northern Indiana Hospital. Speakers were C. L. Williams, M. D., and G. H. Steinmetz, M. D., for the morning clinic;

in the afternoon, papers were presented by Franklin G. Ebaugh, M. D., of Denver; L. H. Gilman, M. D., Indianapolis, and others. Dr. R. L. Sensenich of South Bend, and Dr. F. S. Crockett of Lafayette were speakers at the evening meeting.

A SPECIAL program of lectures and demonstrations in medicine will be held under the direction of the Mayo Foundation from December 3 to 7, inclusive. Mornings will be devoted to surgery and dry clinics. In the afternoons and evenings, medical and surgical subjects, including cardiovascular diseases, diseases of the nervous system, artificial fever, roentgen and radium therapy, laryngology, oral and plastic surgery, gynecology, diseases of the endocrine glands and orthopedics, will be discussed. The program is arranged primarily for the Fellows of the Mayo Foundation, but visiting physicians are invited to attend.

IN celebration of their twentieth wedding anniversary, Dr. and Mrs. Charles Titus, of Wilkinsons, entertained members of the Hancock County Medical Society and their wives at a dinner given in the Columbia Club, Indianapolis, October fourth. Miss Imogene Pierson and Mrs. Russell Spivey provided music for the dinner program, and Mary Margaret Myers gave a reading. Dr. Rollin Moser, Indianapolis, and Dr. Louis Segar, Indianapolis, presented scientific papers, their subjects being "Diagnostic Interpretation of Gastrointestinal Symptoms" and "Recent Advancement in Pediatrics." A beautiful souvenir program was provided for the occasion.

#### EIGHTH DISTRICT MEDICAL SOCIETY

The Eighth District Medical Society meeting will be held at Muncie, November sixth, at two o'clock in the afternoon. A business session will be followed by a clinic at the Ball Memorial Hospital, the clinic to be conducted by Dr. James G. Carr, professor of medicine, Northwestern University School of Medicine, Chicago. Dinner will be served at the Hotel Roberts at six-thirty, following which a program will be given in conjunction with the Muncie Academy of Medicine. Dr. Morris Fishbein, Chicago, editor of the *Journal of the American Medical Association*, will speak, his subject being "The Socialization of Medicine."

THE Tenth District Medical Society met October twenty-fourth at the Gary Hotel in Gary. The afternoon session opened at one o'clock, with greetings from the Lake County Medical Society by Dr. J. A. Teegarden. A motion picture, "Vaginal Hysterectomy for Uterine Prolapse," was shown. Papers were presented by Dr. C. R. G. Forrester, of Chicago; Dr. Austin A. Hayden, Chicago; Dr.



Russell L. Cecil, New York; and Dr. Robert Sonnenschein, Chicago. Officers were elected and a location for the spring meeting decided upon. A dinner meeting was held in the evening, with Count Ernesto Russo, of Milan, Italy, as the distinguished guest speaker. Count Russo, a member of the Italian Legation at Washington, D. C., chose for his subject, "America as I Find It."

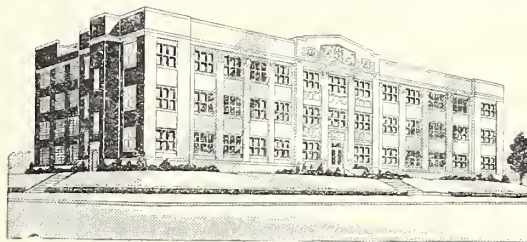
#### A MEDICAL MUSEUM

Efforts are being made to establish a medical museum at the Indiana University School of Medicine. If you have old medical books, old instruments, anything pertaining to the medical profession which may be of interest, and which you are willing to donate to the museum, please write to the Bureau of Publicity of the Indiana State Medical Association, 1021 Hume Mansur Building, Indianapolis. If you know of someone who has such a book or article, write to the Bureau, and attempts will be made to get in touch with the owner. For some time the interest in medical history and in medical Americana has been steadily increasing. Donate your rarities to a museum where others may enjoy them, and where they will be saved from future obscurity.

A RESOLUTION was unanimously adopted by the American Radium Society at its Cleveland session, June 12, 1934, to the effect that while it is recognized that radium has been demonstrated to be of definite value in the treatment of disease, it is quite as potent for harm as for good when used without sufficient skill; it is considered improper, unethical and detrimental to the science of radiology and to the good of suffering humanity for commercial laboratories to attempt to give advice or directions as to the use of radium in the case of a patient whom the person giving that advice has not even had the opportunity to examine. The same criticism, the resolution points out, may be applied to the institutions which rent or supply their radium to those members of their staff or outside of the staff who are unskilled in radium applications, as well as to many individual owners of radium. The approval of the National Board of Radiological Examiners is accepted as the minimum standard for those assuming the responsibility for using radium. These ideas were also adopted by the American College of Radiology. Another resolution adopted by the American Radium Society states that radiologists recognize that in the treatment of malignant disease it is often necessary to carry the treatment on to the extent of producing a violent reaction in the surrounding tissues, which may cause the skin to peel, and blisters to form, in order to give sufficient treatment to overcome the malignant disease; and that it is justifiable to produce a second degree radiodermatitis when necessary.

#### LILLY RESEARCH LABORATORIES OPENED

The new Lilly Research Laboratory building was formally opened, October eleventh, immediately following the close of the annual meeting of the Indiana State Medical Association in Indianapolis. The gathering of physicians and



others for dedication services in the afternoon was in a huge tent, erected adjacent to the new laboratory building, and there were present more than one thousand guests, almost all of whom were in some way associated with investigative or research work, and represented noted bodies and famous institutions in this and foreign countries. In the afternoon, addresses were made by Mr. J. K. Lilly, chairman of the Board of Directors of the company; Dr. Irving Langmuir, director of research for the General Electric Company, discussed "The Unpredictable Results of Research;" Sir Frederick Banting, Toronto, talked on "The Early History of Insulin;" and Sir Henry Dale, director of the National Institute for Medical Research, London, and secretary of the Royal Society, chose as his topic, "Chemical Ideas in Medicine and Biology." The program was followed by an inspection of the new laboratories. In the evening, a banquet was tendered the out-of-town guests; Mr. J. K. Lilly served as toastmaster, and responses were made by Sir Henry Dale; Dr. Elliott P. Joslin, of Boston; Dr. George R. Minot, of Boston; Dr. Frank R. Lillie, of Chicago; Dr. George H. Whipple, of Rochester, N. Y.; Dr. Carl Voegtlin, of Washington, D. C.; and Dr. G. H. A. Clowes, head of the Lilly Research Laboratories.

THE fortieth annual conference of Indiana Health Officers was held October 8 and 9, at the Claypool Hotel in Indianapolis, just preceding the opening of the annual convention of the Indiana State Medical Association. Monday morning, October eighth, papers were presented by Dr. Thurman B. Rice, assistant director of the Division of Public Health, on "Vital Statistics and Morbidity Reporting;" by Eva F. MacDougall, director of the public health nursing Bureau, on "The Value of a Public Health Nursing Service;" by Fred K. Myles, director of the Bureau of Housing, on "Improving Hygienic Conditions in Industrial Plants;" and by J. W. Jackson, M. D., on "What the Health Officer Can Do to Control Communicable Diseases." In the afternoon of the first day, Governor Paul V. McNutt was the first speaker. He was followed by F. M. Rarig, Jr., assistant direc-

tor of the Governor's Commission on Unemployment Relief; Lawrence V. Sheridan, consultant for the State Planning Board; Fred K. Myles, and H. E. Miller, sanitary engineers, U. S. Public Health Service, Washington, D. C. On Tuesday morning the subjects "Sanitation of Milk Supplies," "Sanitation of Food Handling Establishments," "Functions of the State Laboratory," and "Water Supplies and Sewage Disposal," were discussed by John Taylor, director of the Dairy Products Laboratory; Martin L. Lang, state food and drug commissioner; C. G. Culbertson, M. D., director of the Bacteriological Laboratory; and L. E. Geupel, chief of the Bureau of Sanitary Engineering. In the afternoon, Dr. Herman N. Bundesen, M. D., president of the Chicago Board of Health, read a paper on "The Epidemiology of the Chicago Amebiasis Outbreak," which was discussed by Joel I. Connolly, chief sanitary engineer of the Chicago Board of Health. Dr. F. L. Rector, Chicago, director of the American Society for the Control of Cancer, presented a lecture and film on "Control of Cancer."

IN addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories

Bismuth Subsalicylate with Butyn-D. R. L.  
Ampoules Procaine Hydrochloride Solution 10%, 2 cc.  
Ampoules Procaine Hydrochloride Solution 2%, 5 cc.  
Procaine-Epinephrine Solution, 100 cc. Bottle.  
Procaine Hydrochloride Hypodermic Tablets 1/3 grains.  
Procaine Hydrochloride Hypodermic Tablets, 3 grains.

Cutter Laboratory

Solution Dextrose-U. S. P., 25 gm., 50 cc., in bottles.  
Solution Dextrose-U. S. P., 50 gm., 100 cc., in bottles.  
Solution Dextrose-U.S.P., 5%, in Saftiflask containers.  
Solution Dextrose-U. S. P., 10%, in Saftiflask containers.

National Drug Company

Rabies Vaccine (Human) Chloroform Killed.  
Refined Tetanus Toxoid (Alum Precipitated).

Parke, Davis & Co.

Capsule Oral Sodium  $\frac{3}{4}$  grain (0.05 gm.).

Ucoline Products Co.

Ucoline Cod Liver Oil Concentrate.  
Ucoline Cod Liver Oil Concentrate Tablets.

Winthrop Chemical Co., Inc.

Duotal Tablets, 5 grains.

The following product has been accepted for inclusion in the List of Articles and Brands Accepted by the Council, but not Described in N. N. R. (New and Nonofficial Remedies, 1934, p. 439):

Merck & Co., Inc.

Amidopyrine-Merck.

cal students at the state university. Other officers are: vice-president, Ben Siebenthal, Bloomington; secretary, John Atwater, Indianapolis; and treasurer, Julien Kennedy.

DR. ROBERT E. LYONS, JR., graduate of the Indiana University School of Medicine and son of Dr. Robert E. Lyons, head of the I. U. chemistry department, has opened an office in Bloomington. Dr. Lyons was graduated in 1928 and has devoted the past six years to postgraduate study in clinics conducted by Indiana and Chicago Universities, the National Heart Hospital in London, and the University of Munich.

DR. DILLON GEIGER, Bloomington, was the principal speaker at the October meeting of Theta Kaapa Psi, professional medical fraternity at Indiana University. Dr. Geiger spoke on the future of a medical career.

FOUR INDIANA UNIVERSITY medical school students have been pledged to the Phi Beta Pi professional medical fraternity. They are: Roy R. McCoy, Williams; Meredith B. Flanagan, Milltown; Norman F. Richard, Fort Wayne, and Roger R. Reed, Anderson.

GEORGE DAVIS, of Rushville, is the newly elected president of the Phi Chi professional medical fraternity at Indiana University. Ray Miller, Indianapolis, will serve as vice-president of the organization this year, Byron Kilgore, Indianapolis, secretary, and Stewart Smith, Indianapolis, treasurer.

Newly elected pledges of Phi Chi are: Tom Bauer, Lafayette; D. Lee Andrews, Lebanon; Destiny Storey, Washington; George Balsbaugh, North Manchester; Joseph uigley, Indianapolis; Leo Kirch, Indianapolis; Owen Wilson, Anderson; Fred Shaffer, Newcastle; Kenneth Neumann, Lafayette; Bruce Kendall, Indianapolis; Julien Kennedy, Indianapolis.

DR. GUY W. SEATON, 3015 North Capitol Avenue, Indianapolis, has donated to the Indiana University medical school a number of medical books and publications of medical societies, Allan Hendricks, librarian, announced. The donation includes 67 volumes of medical works, 27 volumes of the Journal of the American Medical Association, and a great number of issues of the Journal of the Indiana State Medical Association, together with odd numbers of several other journals.

Dr. Seaton, who is a lecturer at the I. U. medical school, graduated from I. U. in 1898.

## INDIANA UNIVERSITY NEWS NOTES

WILLIAM LYBROOK, of Galveston, has been elected president of the Skeleton Club at Indiana University. This is an organization of all first-year medi-



## WOMAN'S AUXILIARY

While the physicians from all over the state were enjoying the record breaking convention in Indianapolis, their wives and the members of the Woman's Auxiliary were royally entertained by the Woman's Auxiliary to the Indianapolis Medical Society. Almost three hundred women were there to enjoy the splendid program.

Tuesday afternoon the women were taken to Foster Hall, Lilly Estate, where a most interesting afternoon was spent in memory of Stephen Collins Foster. After the explanation of the marvelous collection and the story of Foster's life, a most delightful program of Foster's songs was sung by the quartette, ending, as always is the custom in Foster Hall, with "Old Folks at Home," sung by the quartette and audience, a truly fitting close to a most enjoyable program.

The Athletic Club was the scene of a lovely autumn party, Tuesday night, where over two hundred enjoyed a buffet supper and bridge. Proud were the women who were the recipients of the exquisite prizes.

Wednesday morning the Woman's Auxiliary to the Indiana State Medical Association held its breakfast meeting at the Columbia Club. The meeting was well attended and much interest shown in the work. Everyone regretted the absence of the State President, Mrs. I. N. Trent, Muncie, who was at home because of illness. In her absence the vice-president, Mrs. R. L. Compton, Osgood, presided. The women were heartily greeted by Mrs. J. W. Carmack, chairman of local arrangements. Dr. Thurman B. Rice gave a most interesting address on "Health." He stressed the fact that the ideal health program is a "simple and happy" program as well as a "cheap" one. He also brought out the necessity of more "home life" for the American family. A message from the national President, Mrs. R. W. Tomlinson, was read by Mrs. Frank W. Cregor, Indianapolis, who also gave a report of the Cleveland session. Splendid reports of work done were given by the Committee Chairmen and the County Presidents. The officers elected to serve this next year with Mrs. Edmund D. Clark, of Indianapolis, president, are president-elect, Mrs. R. L. Compton of Osgood;

vice-president, Mrs. Marcus Ravdin of Evansville; recording secretary, Mrs. E. O. Nay of Terre Haute; corresponding secretary, Mrs. John H. Eberwein of Indianapolis; and treasurer, Mrs. Charles F. Neu of Indianapolis.

Wednesday afternoon a style show and tea in the auditorium at L. S. Ayres and Company was most enthusiastically received. The women then joined their husbands for the banquet Wednesday night at the Claypool Hotel. A very entertaining program was given during the banquet followed by the address of Dr. James S. McLester, president-elect of the American Medical Association.

A most generous expression of appreciation is extended the Woman's Auxiliary to the Indianapolis Medical Society for the splendid program and their kind hospitality.

## SOCIETIES AND INSTITUTIONS

### INDIANA STATE MEDICAL ASSOCIATION

#### THE COUNCIL

##### *First Meeting*

(Indianapolis Session, October 9, 1934)

The Council of the Indiana State Medical Association convened for a business meeting in the Louis XIV room of the Claypool Hotel, at 2:00 p. m., Tuesday, October ninth, 1934, with Dr. O. O. Alexander, of Terre Haute, presiding. Roll call showed the following present:

##### *Councillors*

- 1st district—John H. Hare
- 2nd district—H. C. Wadsworth
- 3rd district—H. C. Ragsdale
- 4th district—H. P. Graessle
- 5th district—O. O. Alexander
- 6th district—Samuel Kennedy
- 8th district—M. A. Austin
- 9th district—F. T. Romberger
- 10th district—E. M. Shanklin
- 11th district—George D. Miller
- 12th district—E. M. VanBuskirk

##### *Officers*

- E. E. Padgett, president.
- W. J. Leach, president-elect.
- A. F. Weyerbacher, treasurer.

##### *Members Executive Committee*

- H. H. Wheeler.
- T. A. Hendricks, executive secretary.

##### *Guest*

Harold Camp, M. D., secretary Illinois State Medical Society.

Reading of the minutes of the midwinter meeting of the Council, January 14, 1934, was dispensed with as those minutes were printed in the February issue of *THE JOURNAL*.

The annual councilor reports were accepted as printed in the October issue of *THE JOURNAL*.

The secretary again asked that a continued effort be made to avoid conflict in district meeting dates. He urged councilors to get in contact with the presidents of their district societies, obtain the dates of district meetings, and report them to headquarters office early in the year.

Mr. Hendricks introduced Mr. Wayne Coy, state relief director who succeeded Mr. William Book.

Mr. Coy discussed at length the situation in Indiana in regard to the care of the indigent sick under FERA Regulations No. 7. A general discussion of the problem followed his talk. (Mr. Coy's comments are printed in this issue under Original Articles on page 518.)

Questions were asked by Drs. O. O. Alexander, George Miller, E. M. Shanklin, H. C. Wadsworth, H. C. Ragsdale, and M. A. Austin.

Dr. Harold Camp was asked to make some comments on this work as it is conducted in Illinois. His remarks follow:

"Our plan is somewhat similar to that which you have in Indiana. I believe that we have a few things in our plan about which I have not heard in your state. We have, in a general way, a distinction between the indigents. The normal indigent, which as the Bible says we have with us always, are cared for by the township supervisors. We are working under the township unit plan in our state. It is the duty of the supervisors to care for township poor; the eternal poor, we might say. Then the relief commission is supposed to look after the unemployed indigent, the temporarily indigent. The exception to that is that in the township where the funds are exhausted, the relief commission must come to the rescue. We have in our plan provisions for hospital payments. Our hospitals are paid three dollars per day for necessary hospitalization and physicians are paid a minimum fee for calls to those patients. Emergency operation on any indigent is paid for from these funds. We have several ways of limiting the number of emergency operations. One of the most important parts of the set-up is the county medical society advisory committee. Each society selects a committee of three to be known as the advisory committee to the administrator, and their duties have increased by leaps and bounds. These committees are asked to judge as to the emergency nature of surgical procedures. If any question arises, the advisory committee's word is final upon the matter.

A rather unique plan has been adopted in one of our larger counties recently. In connection with emergency pathology, this county society agreed that in all cases where physicians operating under authorization for a supposedly emergency condition, after a careful examination, if there is no emergency pathology present, the doctor donates his services!

I do not think mention of fees would be in order because you have not mentioned them. They are, I believe, more than you have in Indiana. Our allocation for medical relief in Illinois is fifty cents monthly per family on relief. We have 300,000 families on relief, which means that \$150,000 per month is set aside for relief work. In obstetric and emergency illness, or emergencies such as epidemics—in one county we now have an epidemic of encephalitis which has caused the appropriation to be greatly increased—last month the allocation was exceeded fourteen cents per family; instead of fifty cents the sum of sixty-four cents actually was expended."

Dr. Alexander asked for suggestions as to methods of co-operation with Mr. Coy. Mr. Coy then explained that there are several relief programs, and that approximately fifty per cent of family heads are put on wage relief and fifty per cent on direct relief. Those on wage relief are not given aid for shelter, clothing, food or medical aid—they are to provide those services for themselves. Supplemental aid may be given when indicated.

Dr. Hare suggested that Mr. Coy be permitted to meet with the Executive Committee at monthly meetings to discuss any problems which might arise. Dr. Alexander said that the Executive Committee would act with Mr. Coy at any time.

A letter from Lulu V. Cline, R. N., president of the Indiana State Nurses' Association, was read. The letter concerned the shorter day for nurses. It was moved by Dr. Samuel Kennedy, and seconded, that motions concerning this matter be tabled.

Dr. E. M. Shanklin was unanimously re-elected editor of *THE JOURNAL* for 1935. Dr. Ernest Rupel was unanimously re-elected as a member of the Editorial Board to serve five years. Dr. Rupel's present term expires December 31, 1934.

Date for the midwinter meeting of the Council was set for January thirteenth, Sunday, at ten a. m.

Dr. John Hare presented his resignation to the Council, at the same time expressing his thanks and appreciation for the pleasure he has had in being a member of the Council.

Inasmuch as Dr. Hare's term does not terminate until December 31, 1935, there was some discussion concerning acceptance of Dr. Hare's resignation.

Dr. Miller moved that Dr. Hare's resignation be accepted, and a vote of thanks extended for his work. The matter of the vacancy is to be acted upon by the House of Delegates. Motion seconded and carried.

Dr. Shanklin brought to the attention of the Council a matter which was discussed in an earlier meeting of the Editorial Board; a plan whereby upperclassmen in the medical department of Indiana University might be given an interest in organized medicine through a so-called "junior" membership in the Association, and through the privilege of being permitted to subscribe to *THE JOURNAL* at a rate of one dollar per year. Dr. Ragsdale and Dr. Romberger discussed this suggestion.

Dr. Shanklin made a motion that subscriptions to *THE JOURNAL* of the Indiana State Medical Association be accepted from such of the upper classmen of the medical department of Indiana University as wish to subscribe, at the rate of one dollar per year.

After some discussion, Dr. Miller seconded the motion, which was carried.

The Council adjourned until Thursday morning following the meeting of the House of Delegates.

THOMAS A. HENDRICKS,  
*Executive Secretary.*

As there was no unfinished business, the Council did not hold a second meeting.

## HOUSE OF DELEGATES

### *First Meeting*

The first meeting of the House of Delegates convened at four o'clock, Tuesday afternoon, October 9, 1934, in the Riley Room of the Claypool Hotel, Indianapolis, the president, Dr. E. E. Padgett, of Indianapolis, in the chair.

THE CHAIRMAN: You have been given a slip as you came in the door. If each of you will sign this slip and give it to Dr. Miller as you go out, that will save our calling the roll. According to Chapter IV, Section 3, of the By-Laws, twenty delegates constitute a quorum. It is very evident that we have a quorum here; the House of Delegates, therefore, is declared open and ready for the transaction of business.

I wish to call your attention to the fact that the By-Laws may be amended at any annual session by a majority vote of all delegates present at that session after the amendment has laid on the table for one day. Also, the House of Delegates may amend any article of the Constitution by a two-thirds vote of all delegates present at any annual session provided that such amendment shall have been presented in open meeting at the previous annual session and that it shall have been published twice during the year in *THE JOURNAL* of the Association.

The minutes of the last meeting of the House of Delegates were published in *THE JOURNAL* of November, 1933. Will someone make a motion that we dispense with the reading of these minutes? (Dr. William R. Davidson moved that the reading of the minutes be dispensed with; motion seconded by Dr. F. T. Romberger, and carried.)

We have with us this afternoon two guests from the state of Illinois. We would like to hear from Dr. Harold Camp, secretary of the Illinois State Medical Society.



DR. HAROLD CAMP: Mr. President, and members of the House of Delegates: I come this afternoon to bring you the felicitations of the Illinois State Medical Society. We held our annual meeting last May. This is the first meeting I have attended in October and I am very much impressed with a fall meeting. I didn't come here this afternoon to tell you that we have a better society than you have, but I do think that the societies in this part of the country have the same problems. I think it is well for us to get together. We had the pleasure last spring of having an official delegate from your society present—Davy Crockett. We have some very important considerations before our societies at this time. I believe at the present time the most serious problem that we have and one that we must face and be eternally vigilant on is the matter of socialization of medicine. As you all know, there is a very definite organized group spreading its tentacles in all directions with the idea in mind of taking over the practice of medicine and placing it under governmental supervision. . . . I think we have too many members of our profession who are indifferent and who do not know the difference between health insurance and state medicine. We should all be enlightened in this regard first, and then, second, we should educate the public. . . . This is the first society meeting I have attended in twelve years where I have been able to sit back and watch the other fellow work. I am glad to be here.

THE CHAIRMAN: We would like to hear from Dr. Burgess from Illinois.

DR. G. O. BURGESS: I would like to extend an invitation to the men to come over to the Illinois meeting which will be held at Rockford in May.

THE CHAIRMAN: It has been customary for the last two years to invite the delegates to the A.M.A. to sit in the House of Delegates so that they may be better prepared to attend the A.M.A. meetings. We take it for granted that they know they are invited and I hope they are here. They are:

Delegates	Alternates
H. G. Hamer, Indianapolis	W. F. Kelly, Indianapolis
R. L. Sensenich, South Bend	E. M. Shanklin, Hammond
Don F. Cameron, Ft. Wayne	W. F. Carver, Albion
F. S. Crockett, Lafayette	G. D. Scott, Sullivan

(Upon the motion of Dr. Romberger, seconded by Dr. Herman Baker, and carried, the delegates and alternate delegates to the A.M.A. were duly invited to sit in the House of Delegates with the power to discuss, but not to vote.)

It becomes the duty of the president at this time to appoint the reference committees. We have ten such committees. These reference committees should not be confusd with the all-year round standing committees; they are to serve only during this session. To these committees will be referred all reports, resolutions and measures presented to the House of Delegates at this session, except such matters as properly come before the Council, and the recommendations of these committees shall be submitted at the next meeting of the House of Delegates for acceptance in the original or modified form, or for rejection. The next meeting of the House of Delegates will be held Thursday morning at seven o'clock. Each committee consists of five members, the first member named to be the chairman of the committee. These men will please stand when their names are called and remain standing until the names of all members of the committee have been called in order that they may know each other.

Committee on Reports of Officers:

M. R. Lohman, Fort Wayne, Chairman	Allen
M. C. McKain, Columbus	Bartholomew
J. E. Ferrell, Fortville	Hancock
W. E. Thomas, Greensburg	Decatur
M. L. McClain, Scottsburg	Scott

Sections and Section Work:

J. H. Green, North Vernon, Chairman	Jennings
R. C. Beeler, Indianapolis	Marion
E. O. Asher, New Augusta	Marion
C. E. Munk, Kendallville	Noble
L. W. Veach, Bainbridge	Putnam

Rules and Order of Business:

J. T. Oliphant, Farmersburg, Chairman	Sullivan
E. A. Rainey, Lebanon	Boone
A. S. Giordano, South Bend	St. Joseph
A. B. Graham, Indianapolis	Marion
T. C. Eley, Plymouth	Marshall

Medical Education and Hospitals:

O. G. Brubaker, North Manchester, Chairman	Wabash
W. L. Portteus, Franklin	Johnson
A. C. Yoder, Goshen	Elkhart
G. N. Combs, Terre Haute	Vigo
W. R. Davidson, Evansville	Vanderburgh

Public Policy and Legislation:

C. E. Gillespie, Seymour, Chairman	Jackson
Jon Kelly, LaPorte	LaPorte
M. A. Austin, Anderson	Madison
George Dillinger, French Lick	Orange
R. L. Lochry, Indianapolis	Marion

Publicity:

O. R. Spigler, Terre Haute, Chairman	Vigo
M. F. Boulden, Frankfort	Clinton
C. A. Stayton, Indianapolis	Marion
T. R. Owens, Muncie	Delaware-Blackford
Russell Lavengood, Marion	Grant

Hygiene and Public Health:

C. J. Clark, Indianapolis, Chairman	Marion
Samuel Kennedy, Shelbyville	Shelby
Walter M. Stout, Newcastle	Henry
M. D. Wygant, Mishawaka	St. Joseph
H. P. Gracssle, Seymour	Jackson
Herman G. Morgan, Indianapolis	Marion

Amendments to Constitution and By-Laws:

W. F. Kelly, Indianapolis, Chairman	Marion
Frank Cregor, Indianapolis	Marion
George Daniels, Marion	Grant
Will Thompson, Liberty	Wayne-Union
W. M. Varble, Jeffersonville	Clark

Credentials:

Paul Garber, South Whitley, Chairman	Whitley
Max Bahr, Indianapolis	Marion
C. L. Luckett, Terre Haute	Vigo
P. H. Schoen, New Albany	Floyd
K. L. Hull, Worthington	Greene

Miscellaneous Business:

Herman Baker, Evansville, Chairman	Vanderburgh
L. N. Ashworth, Connersville	Fayette-Franklin
A. R. Kresler, Rensselaer	Jasper-Newton
W. E. Amy, Corydon	Harrison
C. M. Clark, Oakland City	Gibson

Those men I have named will have with them as ex officio members the members of the standing committees. The committee chairmen should call their committees together immediately upon the adjournment of the House of Delegates and make arrangements to hold their meetings not later than Wednesday.

REPORTS OF OFFICERS

Now we have the reports of officers. These reports are printed in the October number of THE JOURNAL and in the handbook of the House of Delegates but each chairman will receive five minutes to make any additions or explanation to the reports already published. First is the report of the executive secretary.

MR. T. A. HENDRICKS: It usually has been customary for the officers, when called upon, to say that the reports as printed in the handbook would stand as read. At this time I wish to add nothing at all to the report of the executive secretary but merely as emphasis to repeat several paragraphs in that report:

"The physicians of the state are looking as never before toward you who are their chosen representatives for leadership and are hoping in some way that you who make up

this body may find a solution for many of their professional and economic troubles and cares. Hence the principles promulgated and the actions taken by the House in this, a session that may prove to be one of the most important in the history of the profession, will determine to a great extent the future course of the Indiana State Medical Association as an organization, and to a greater extent than anyone knows the career of individual members of the profession now in practice and those who will be the future physicians of the country.

"From the mass of correspondence and material that has come into the headquarters office during the past year, from the many conferences and conversations with doctors, and from general contact with physicians, your executive secretary can say that now, as never before, the average Indiana doctor is interested in and informed on these problems and is demanding that something definite be done about them by the American Medical Association and the Indiana State Medical Association.

"Despite the serious outlook, it truthfully can be said that the state organization never has been stronger and never faced the future more confidently than today."

Of course, we at headquarters await your orders.

THE CHAIRMAN: This report will be referred to the Reference Committee on Reports of Officers.

Report of the Treasurer

Referred to Reference Committee on Reports of Officers.

Report of Chairman of the Council

DR. O. O. ALEXANDER: I have nothing to add to the report of last year's activities of the Council. The Council held its first meeting this afternoon and there are two things I would like to report. Dr. Shanklin was re-elected editor of THE JOURNAL for 1935. Dr. John Hare, of Evansville, resigned as councilor of the first district. It will be necessary for this House to elect a councilor at its next session to succeed Dr. Hare.

Referred to Reference Committee on Reports of Officers.

#### REPORTS OF STANDING AND SPECIAL COMMITTEES

Committee on Credentials

Referred to Reference Committee on Credentials.

Executive Committee

Referred to Reference Committee on Reports of Officers.

Committee on Arrangements

Referred to Reference Committee on Miscellaneous Business.

Committee on Scientific Work

Referred to Reference Committee on Sections and Section Work.

Committee on Public Policy and Legislation

Referred to Reference Committee on Public Policy and Legislation.

Journal Publication Committee

Referred to Reference Committee on Reports of Officers.

Bureau of Publicity

DR. W. N. WISHARD: I only wish to call your special attention to one particular paragraph which you will find on page 53 of the handbook. . . . If any county is omitted in the history which Dr. Zerfas is preparing, it will be because that county did not respond. The Bureau of Publicity has been working actively during the past year—in giving information to the public in understandable language. In regard to radio broadcasting, it is true that there is a difference of opinion as to how far we should go. It is true that in one state broadcasting and newspaper articles have carried the name of the person broadcasting or writing the article, and someone ingenuously apologizes by saying that after a man has prepared an article for publication he should have the right to have his name published. It is the rule of the Bureau of Publicity, and it has been repeatedly and unanimously approved by the House of Delegates, that this should be presented in an impersonal way, in the name of the medical society to which the member belongs.

Perhaps there is a psychological form of scabies which manifests an itching for personal publicity which the Indiana State Medical Association does not approve. The Bureau of Publicity is wholeheartedly in accord with the attitude of

the State Association and the present Bureau will continue to maintain what it conceives to be a progressive and highly ethical attitude in its interpretation of the right kind of medical publicity.

(At this time Mr. Hendricks read a supplemental report to the report of the Bureau of Publicity which follows.)

"As the Advisory Health Council of the State of Indiana has approved a tuberculosis campaign to be presented to the Indiana State Medical Association for its consideration; therefore, be it

*"Resolved,* That a tuberculosis campaign for the State of Indiana be approved by the House of Delegates, to be conducted through cooperation with the district and county medical societies and the State Division of Public Health, and the Advisory Health Council of the same, and through physicians in the state who are particularly interested in tuberculosis problems."

The Bureau of Publicity report as printed in the handbook was referred to the Reference Committee on Publicity. The supplemental report of the Bureau of Publicity was referred to the Reference Committee on Hygiene and Public Health.

Committee on Civic and Industrial Relations

Referred to Reference Committee on Public Policy and Legislation.

Committee on Medical Education and Hospitals

Referred to Reference Committee on Medical Education and Hospitals.

Committee on Neurology

Referred to Reference Committee on Miscellaneous Business.

Committee on Secretaries' Conference

Referred to Reference Committee on Miscellaneous Business.

Committee on Graduate Education

Referred to Reference Committee on Medical Education and Hospitals.

Committee on Diphtheria Prevention

Referred to Reference Committee on Hygiene and Public Health.

Committee on Study of Health Insurance

Referred to Reference Committee on Public Policy and Legislation.

DR. M. A. AUSTIN: The Committee on Health Insurance has held two meetings in the last few months and has considered many matters of vital importance. At the last meeting certain matters came up which we felt should be considered not only by the committee but by the House of Delegates, and it was deemed advisable that Dr. Sensenich, a member of the national association committee, who has been in conference with us, should present these matters. Therefore I am asking that this House of Delegates, after adjournment of this meeting, meet in executive session that it may hear Dr. Sensenich.

THE CHAIRMAN: A motion to that effect will be necessary to hold such a meeting.

(Dr. W. F. Kelly made the motion that the House go into executive session after adjournment of this meeting to consider plans on health insurance. Motion seconded by Dr. A. S. Giordano and unanimously passed.)

DR. AUSTIN: After this meeting the presidents and secretaries of the county medical societies are asked to be present.

DR. F. W. CREGOR: I make a motion to the effect that the visitors from Illinois be invited to the executive session.

DR. KELLY: I would amend that to add that all the members of the Committee on the Study of Health Insurance be invited. (Motion as amended duly seconded, and carried.)

Committee on Veterans' Hospitalization

Referred to Reference Committee on Public Policy and Legislation.

Committee on Study of High School Athletics

Referred to Reference Committee on Hygiene and Public Health.

Public Relations Committee

Referred to Reference Committee on Public Policy and Legislation.

Committee on Lye Burns in Children

Referred to Reference Committee on Hygiene and Public Health.



Committee on Study of Puerperal Mortality

DR. E. O. ASHER: The only addition I would make to the report as printed in THE JOURNAL is in regard to obtaining data on this subject. We have tried to find a way to do that but there is no way but what would be very expensive and, after all, inaccurate. This committee regards the report of the Department of Labor in the Division of Child Health as a very important document—it covers thirteen states in the United States . . . and has very valuable information. Therefore, we have made no effort to get statistics for Indiana as was once directed.

Report referred to the Committee on Hygiene and Public Health.

Committee on State Fair

Referred to Reference Committee on Publicity.

Committee on Mental Health

Referred to Reference Committee on Hygiene and Public Health.

Report of Delegates to the A. M. A.

DR. D. F. CAMERON expressed the appreciation of the delegates to the American Medical Association for the privilege of sitting in the Indiana House of Delegates, saying that as the State Association frequently gives mandates to the A. M. A. delegates, it is very helpful to them to be allowed to listen in. He referred the House of Delegates to the official report of the delegates which appeared in the July, 1934, JOURNAL.

Referred to Reference Committee on Reports of Officers.

Report of Statistician

Referred to Reference Committee on Reports of Officers.

Report of Historian

Referred to Reference Committee on Reports of Officers.

Report of Committee on Codification of Constitution and By-Laws

Referred to Reference Committee on Amendments to Constitution and By-Laws.

THE CHAIRMAN: Our incoming president, Dr. Leach, will now talk to us.

DR. W. F. LEACH: It seems to me we have more problems than we have ever had before. At the beginning of this year, as in the past, we must have organization, most thorough organization. It seems to me that that will be the foundation stone on which we will have to build ourselves out of this difficulty that has come as a result of the depression. The county society is the unit whereby we must do our work. With every county society standing shoulder to shoulder and finally settling its troubles, the difficulties will be very much less. It is not supposed that every man in the county society should have everything he wants. Certainly we want to be liberal but we want to stand firm in the thing that is going to give us a good foundation that will get us over our difficulties. The presidents and secretaries of the county societies are of first importance. . . . If getting the county society to working would become universal, that would settle our difficulties. . . . It seems to me that the people of America cannot successfully oppose 150,000 doctors. On that basis I want to suggest—the doctors must become the educators of the people. We must work at it every day of our active duties. We can drop little suggestions here and there. We can gain much to establish confidence in the people's minds, make them confident that we are sincere and do know. . . . Give the people some idea of state medicine and what it may amount to. They don't know so much about this, someone must tell them, and we are the ones to tell them. . . . There are many young doctors coming on; some of the best talent in the world ready to go out and make names for themselves. Let us all throw a friendly hand to them; teach them that they don't have to take a cheap contract job; encourage them in this fact—that if they stay with the profession, the profession is going to stay with them and they don't have to make an independent deal. Let us take them into our confidence and teach them in as forceful a way as possible.

The American medical profession must not lose its enthusiasm for scientific advancement or its initiative for organized effort, or have its traditional ideals and purposes thwarted by subtle non-professional interference. Eternal vigilance is the price we must pay. Ignorance and vicious propaganda are our eternal enemies. Therefore, *educate the public.*

Let us pay particular attention to the publications in our JOURNAL. We have a JOURNAL which we are proud of. Our editor and his staff are working hard to make it the best in the country. I think they have succeeded. If the county society will urge its members to keep their eyes on the information published there, they will be better equipped when they come to their county society meetings. They will have something on which to act in a positive way.

Unfinished Business

THE CHAIRMAN: We have this resolution which was presented by Dr. W. F. Kelly last year:

"Amendment to By-Laws, Chapter VIII, Section 1:

"To insert the following named committees after the words, 'A Committee on Budget':

A Committee on Public Relations.

A Committee on Secretaries' Conference.

A Committee on Credentials.

A Committee on Necrology.

A Committee on Journal Publication.

"Also to insert after the words 'Executive Committee' in line 11 the words, 'and Committee on Journal Publication,' and following the word 'Committee' and preceding the words 'the president' to insert the following: 'Either the president, or any committee with consent of the president, may appoint a subsidiary committee to assist a committee with its work.'"

DR. KELLY: This resolution is covered by the new codification of the Constitution and By-Laws, and I move you that it be laid on the table. (Motion seconded by Dr. Shanklin, and carried.)

New Business

DR. B. G. KEENEY: Last year at the meeting of the House of Delegates I urged that some action be taken by the State Medical Association with reference to the National Board of Medical Examiners. If you remember, that motion was voted down. Since that time the Educational Committee of the American Medical Association at Cleveland recommended that every state should recognize the National Board. . . . It also pleased me when I had a letter from the National Board saying that our state board felt kindly toward the National Board. Therefore, I have drawn up the following resolution:

"Resolved, That the Indiana State Medical Association shall recommend that the State Legislature, at its next session, shall so word the Indiana Medical Practice Acts that the State Board of Medical Registration shall accept from candidates for licensure a certificate of successful examination issued by the National Board of Medical Examiners."

Referred to the Reference Committee on Public Policy and Legislation.

DR. W. F. KELLY presented the following resolution:

"Whereas, The American Medical Association has officially recognized existing national examination boards in certain specialties, and has approved and assisted in the formation of national examining boards in other specialties, whose official duty shall be to examine applicants and certify those qualified, and has set up a governing board for the correlation of activities by the individual boards,

"Be it Resolved, That the House of Delegates of the Indiana State Medical Association in session, this ninth day of October, 1934, record its approval of this effort on the part of the American Medical Association to elevate the standard of professional work in the medical specialties."

DR. KELLY: This resolution has been approved by the Marion County Medical Society.

Referred to the Reference Committee on Medical Education and Hospitals.

DR. F. T. ROMBERGER presented the following resolutions:

"Whereas, The Indiana State Board of Medical Registration and Examination has rendered a timely ruling to the effect that administering an anesthetic is in deed and in fact medical practice, and

"Whereas, This decision has been upheld by the Attorney General of the State of Indiana, and

"Whereas, The hospitals of the state of Indiana have been notified and asked to comply with the aforesaid ruling, and

"Whereas, It is believed that this move is for the benefit of the public weal and for the good of the medical profession at large, and

"Whereas, The undersigned physicians have been practicing in whole or in part the specialty of anesthesia for a varying number of years, and

"Whereas, Those whose signatures are herewith appended are licensed to such practice of medicine in the state of Indiana, are members of their respective county societies and, through them, of the Indiana State Medical Association, therefore,

"Be it Resolved, That we, the undersigned, petition and pray that the House of Delegates of the Indiana State Medical Association grant to us, as our inalienable right, the privilege of organizing a Section on Anesthesia wherein we may meet to discuss the social and economic features relating to and wherein we may present scientific data pertinent to the specialty of anesthesia, and

"Be it Further Resolved, That the following amendment be made to the present Constitution and By-Laws of the State Association, to-wit:

"Chapter III of the By-Laws, entitled 'Sections,' to read as follows:

"Section I. During the annual session, the Association may meet in the following Sections:

- a. Surgical
- b. Medical
- c. Eye, Ear, Nose and Throat
- d. Anesthesia
- e. Any other Sections that hereafter may be provided for by the House of Delegates.

Respectfully submitted,

FLOYD T. ROMBERGER, Lafayette.  
 LILLIAN B. MUELLER, Indianapolis.  
 ROBERT M. KELSEY, LaPorte.  
 WENDELL L. SPALDING, Mishawaka.  
 E. M. SIRLIN, Mishawaka.  
 PAUL E. HALEY, South Bend.  
 J. M. WHITEHEAD, Indianapolis.  
 H. A. KINNAMAN, Crawfordsville.  
 R. A. GEIDER, Indianapolis.  
 C. H. JINKS, Indianapolis.  
 F. A. THOMAS, Indianapolis.  
 F. W. RATCLIFF, Lafayette.  
 CHARLES N. COMBS, Terre Haute.  
 S. C. WAGNER, Elkhart.  
 CLARENCE S. BAKER, Evansville.  
 C. E. RAGAN, Terre Haute.  
 EARL M. SHENK, Kokomo.  
 ARTHUR W. HULL, Elkhart.  
 RICHARD B. STOUT, Elkhart.  
 JOSEPH C. DUSARD, Bedford.  
 B. J. MATTHEWS, Indianapolis.  
 E. A. KING, Ft. Wayne.  
 PAUL S. YOCUM, Gary.  
 E. T. ZARING, Terre Haute.  
 A. M. KIRKPATRICK, Columbus.  
 GRACE CAUFMAN, Evansville.  
 EARL VAN REED, Lafayette.  
 ETTA CHARLES, Anderson."

Referred to the Reference Committee on Sections and Section Work and the Reference Committee on Amendments to the Constitution and By-Laws.

DR. C. A. STAYTON: I have a resolution which has been approved by the Indianapolis Medical Society:

"Whereas, The medical profession of Indiana has perfected a strong organization known as the Indiana State Medical Association, with local societies in every county, and

"Whereas, The medical profession is primarily interested in the protection of the public health, the advancement of scientific medicine and the permanence of its educational and organization work, and

"Whereas, THE JOURNAL of the Indiana State Medical Association affords the best opportunity to disseminate professional and lay information for the promotion and protection of the ideals of ethical medicine in Indiana, and

"Whereas, There is a considerable sum in the treasury of the State Association which should not at any time be used for current expenses in making up the annual budget, and which, wisely invested, will greatly increase the amount and sooner or later be available as building fund,

"Therefore, Be it Resolved, That the incoming president appoint a committee of three, and that the duty of this committee shall be to carefully investigate the possibility of the future acquisition of a permanent home for THE JOURNAL of the Indiana State Medical Association and for the Association offices and headquarters for our state organization, and that to this end this committee shall make a survey of the finances of our State Association both as to a permanent fund, the annual income, the budget, and all other questions relating to the possibility of ultimately acquiring real estate for the purpose herein mentioned, and further, that such committee report progress at the next annual meeting of this Association, and that this committee be continued from time to time unless otherwise determined by the House of Delegates.

Approved by  
 INDIANAPOLIS MEDICAL SOCIETY."

Referred to the Reference Committee on Miscellaneous Business.

DR. MAX BAHR: The delegates of the Marion County Medical Society propose the following resolution:

"Whereas, President Dean Lewis of the House of Delegates of the American Medical Association states 'the medical profession requires the good will and respect of the people; I know of nothing that makes people more suspicious of those engaged in the practice of medicine than the expert witness. Lay people must think that medicine does not even approach an exact science when two men of equal distinction in medicine will give diametrically opposite statements to questions that are asked at a trial.

"Members of the bar realize the futility of much expert testimony, and I would like to see the bar association approached by a committee appointed by the House of Delegates to see whether some method of procedure could be devised by which the expert witness could be eliminated. A reference board, appointed by some competent authority or commission, would probably be most satisfactory, for it could examine in camera the testimony and the documents and hand down the decision, thus avoiding the amazement concerning the conflicting statements of equally capable men."

"Whereas, The House of Delegates of the American Medical Association suggests that this matter be taken up by the individual State Medical Associations,

"Therefore, Be it Resolved, That the Indiana State Medical Association hereby invites the Indiana State Bar Association to join with them in the consideration of the problems concerning expert evidence and in the preparation of a report thereon; and that the president of the Indiana State Medical Association be, and he hereby is, authorized to appoint a special committee of three to represent this Association in working in conjunction with the Indiana State Bar Association through any committee or other regularly constituted representatives of the State Bar Association, in studying the said subject and preparing a report thereon; and that if the Bar Association accepts this invitation to join in the study of the problems of expert evidence, and that the committee herein authorized to be appointed assist in the preparation of a report upon the said subject."

"Resolved Further, That a copy of this Resolution be transmitted to the Indiana State Bar Association."

#### SUGGESTIONS FOR REFORM RELATIVE TO THE MATTER OF EXPERT TESTIMONY

House of Delegates,  
 Indiana State Medical Association.

Gentlemen:

It has been suggested by the delegates of the Marion County Medical Society that some changes be recommended relative to the present deplorable contradictory method of expert testi-



mony in medico-legal cases. The committee appointed to investigate this situation has contacted with the local Bar Association and with Mr. Albert Stump in order that some definite cooperative plan between the Medical Society and the Bar Association might be recommended.

Practically every medical man is destined to appear in court, if not as a medical expert then as a witness to fact.

This is because so many cases that come to trial are dependent for proper adjudication, at least in part, on the physician's observations.

The family physician is frequently the person best qualified to recount the history of the accused and to state the extent of the havoc wrought by prior injury or illness. The plaintiff's attending physician is almost indispensable in a personal injury suit. No one has better opportunity for becoming familiar with the mental condition of a person who is executing a will than the testator's physicians. This is also true usually where such questions as commitment, guardianship, restoration, capacity to contract and criminal responsibility arises. The law touches medical science at so many points the physician must be made available to give the court the benefit of the knowledge he has gained with special reference to the case at bar.

Whether a witness is or is not an expert in any particular science or art must be determined before he is permitted to testify either before a grand jury or in the trial of a case.

Such qualifications are determined by professional, scientific or technical training or by practical experience in some field of human activity, which confers on him an especial knowledge not shared by individuals in general. Superior qualification is attained when the two are united in the same person. The man of scientific or professional attainments is a more valuable witness if he has extensively practiced his calling.

The ultimate judges of the qualifications of an expert are the jury. After the court has admitted the expert's testimony, it is for the jury to decide whether any, and if any, what weight is to be given to the testimony. The judgment of an expert is valuable precisely in accordance with what is back of it.

Much criticism is heard of what is alleged to be the bias of medical experts when serving as witnesses. Statements of this character are sometimes made seriously by responsible persons; but more often emanate from the garrulous gossip of court "fans" and loungers. In some instances it must be admitted that such criticism is not entirely without foundation. In the majority of cases, however, it is without basis. The appearance of bias is in most instances due fundamentally to the nature and function of expert testimony. Expert witnesses are opinion witnesses as distinguished from fact witnesses. Opinion may be defined as a deduction or conclusion concerning a matter about which two persons can, without absurdity, think differently. Considering expert witnesses, other than medical, it is generally conceded that there may be honest difference of opinion. Real estate experts are frequently the two sides in a controversy to testify as to the probable benefit of certain public improvements to adjacent property and as to the amount of the special assessment that should be spread against such property. On the same statement of facts as to the nature and character of the improvement, two real estate specialists of vast experience may differ widely as to the increment of value that will accrue to abutting property because of the improvement, and though they differ perhaps by thousands of dollars in their conclusions, little or nothing is heard as to bias on the part of such experts. Railroad employees operating trains are permitted by the courts to testify as experts in regard to the distance a certain train, consisting of an engine and a certain number of cars of specified weight and going at a definite speed, would go after brakes were applied in a specified manner before it could be brought to a stop. Even with definite physical facts of weight, speed, and momentum to reason from, one may hear as many different opinions as there are expert witnesses on the stand, and yet there is no thought of criticism or comment that bias or the payment of a fee has influenced the conclusions drawn.

The same applies to handwriting experts in forgery cases, bank experts in fiscal cases, and mechanical experts in cases

in which there is litigation as to basic ideas in patents. Any or all of these experts may differ from each other more widely than do the medical experts in any particular incident, in spite of the fact that the data serving as the basis for the opinion are far more tangible.

The situation of the medical expert is, as a rule, more difficult than that of other opinion witnesses. He is consulted by an attorney in a given case and certain facts are set before him as capable of proof in an ensuing trial. At the trial these facts are established in evidence, are embodied in a hypothetical question and the opinion of the expert is called for. In answering, the medical expert expresses an opinion, which must be based on the facts assumed, and gives reasons of such opinion. An attorney for the other side in the case collects a different set of facts that are consistent with his theory of the cause at issue and establishes them as evidence. He also confers with an expert and secures an opinion based on the facts he has collected. The opinions of the medical expert differ chiefly because they are based on different facts, or on facts presented in a different setting, with stress placed in accord with the theory of the opposing counsel. The question may be asked: Why criticize two medical experts for being of opposite opinions in a trial and make no comment as to the integrity of the two lawyers who are on opposite sides in the same case? Clearly two medical experts of known integrity, with profound learning in their respective fields and with wide experience, can, without absurdity or falsehood, think differently in regard to any particular case at issue.

This is frequently noted at our society meetings and is the one thing in particular which stimulates heated discussions and adds greatly to the interest of the meetings.

The hypothetical question put to the experts by opposing counsel assume certain facts to be established and the jury then decides which set of facts is true, and which expert testimony with the reasons given therefor, is most in accord with facts it accepts.

The following suggestions are made by the committee to rectify the present unsatisfactory and unscientific methods of expert testimony in medico-legal cases:

1. Consultation by the various experts with each other and, if agreement be reached, the preparation of a joint report to be presented to the court.

2. That evidence of a highly technical nature need not be directly presented to the jury by expert testimony which only confuses and befuddles the minds of the jury but that the finding of the joint report be presented to them by the presiding judge.

3. Expert medical testimony will be considered with greater respect and dignity if placed on a higher plane and will not be thought of as at present by the public, to be largely worthless through the conflict of opinions that seemingly are biased as a direct result of the fees paid by those who employ the witnesses.

4. Seemingly unbiased expert evidence which can be produced by the court will reflect greater respect for the medical profession.

5. Medical men should be called before their medical societies to defend their statements made in court under oath, before juries consisting of laymen, when these statements were against all present knowledge of medical science and not in accordance with any medical authorities.

6. Medical societies ought to pay careful attention to expert testimony given by members of the medical profession, and to draw attention of the courts to such testimony if it is at variance with facts in the possession of medical science.

7. A physician owes a duty to his patient; but that duty is bounded by honesty, decency, justice, and truth. If the expert knows that the scientific and medical facts are not favorable to the patient who is a party to a suit, he should frankly inform the patient and his lawyer before the trial, and firmly tell them that he will say the same thing on the witness stand if trial is resorted to. The expert should remember that he is not the advocate. He should not feel that he carries the whole case on his own shoulders. Let him come into court with clean hands and with sincerity of pur-

pose, with a tendency and desire to ascertain and recognize truth whenever it may be found.

8. Our local courts should select their own experts for a neutral opinion from experts in a particular specialty required from membership of our society, with the advice of the society, and that the fees be paid by court order. The court would have discretion to make the fee adequate, depending on the nature of the case and the time of the expert required. This is done in many European countries and in some American states in a modified way.

9. Appropriate legislation should be passed to enable the court to secure the aid and impartial help of those whose aim and purpose should be that justice shall be done and that the two foremost professions, medicine and law, may continue to maintain their deserved dignity in court.

#### SUGGESTED RESOLUTIONS PERTAINING TO THE MATTER OF EXPERT TESTIMONY

*"Resolved,* By the House of Delegates of the Indiana State Medical Association that it recognize the urgent need for remedial legislation and such changes in court procedure as will correct the abuse of expert opinion evidence; approve the efforts of the Indiana Bar Association; and further be it

*"Resolved,* That the House of Delegates endorses the principle that in civic and criminal cases the court may appoint expert medical witnesses, who shall be paid out of public funds, and who may furnish a written report; and that the Indiana Medical Association offers its cooperation by such means as lie in its power to promote such legislation as will be mutually satisfactory to the medical and legal professions toward the correction of the present unsatisfactory procedure of presenting expert opinion evidence, and

*"Further be it Resolved,* That the House of Delegates endorses certain principles approved by the Committee on Legislation and Public Policy of the Indiana State Medical Association and the Indiana State Bar Association.

*"That* in civil cases and criminal cases wherever the issue of insanity is raised, expert medical witnesses may be appointed by the court, and paid from public funds, and that such witnesses may present a written report.

*"Be it Further Resolved,* That a copy of this resolution be sent to the Indiana State Bar Association.

Respectfully submitted,

MEMBERS OF THE COMMITTEE.

Referred to the Reference Committee on Public Policy and Legislation.

DR. F. S. CROCKETT at this time gave an informal report on his visit to the Illinois State Medical Society last May as an official delegate of the Indiana State Medical Association, saying that the Illinois Society is deeply concerned with the same problems that are confronting the Indiana Association—the care of the indigent sick, contract practice, and the problems of state hospitals and the medical school practicing medicine in competition with the medical practitioners of the state. He spoke at length upon the relationship between the Illinois Department of the American Legion and the Illinois Medical Society, and the valuable results that are thereby being obtained. He said, "The Illinois Society has a Committee on Veterans' Service and that committee works in very close co-operation with the Illinois Department of the Legion. We have made some start in Indiana in that direction, to give to Indiana some voice in the conduct of legislation or in the agitation for legislation which has something to do with our members as doctors.

"I came back from my Illinois visit with a great deal of encouragement. While I am told that there are only about fourteen states in the United States organized like Indiana and Illinois, those states I believe are in the middle west to a great extent.

"I attended the Minnesota State Medical Association meeting this summer. They are carrying on the same sort of effort to combat the various things that are bothering us here; they are organized in the way we would like to be organized. They charge \$15.00 there and we charge \$7.00 here, and it is remarkable the amount of work we are getting done through our own organization."

At this time the chairman read a telegram of greeting from Dr. J. H. Weinstein, president 1933, who was in the west on a vacation. Upon the motion of Dr. W. R. Davidson, duly seconded and carried, the chairman appointed a committee consisting of Doctors Crockett, Leach, Shanklin, and Mr. Hendricks to reply to this message.

DR. F. W. CREGOR: For the past three or four weeks a former president of this Association has been confined to his home very ill, Dr. Chase Sexton, of Rushville. I would like to move that the secretary send a message to Dr. Sexton. Motion seconded, and carried.

DR. W. B. CHRISTOPHEL: We have a former president in South Bend who is ill. We believe a message from this Association would be a great joy to his heart. I make a motion that the secretary be instructed to send a telegram to Dr. Berteling. Motion seconded by Dr. George D. Miller, and carried.

THE CHAIRMAN asked that the reference committee chairmen organize their committees so that their work would be completed by the next meeting of the House of Delegates.

THE CHAIRMAN: We do not adjourn. We go into executive session. I am going to appoint Dr. Miller as sergeant-at-arms to see that those who should stay in, stay in, and those who should be out, go out.

At this time the House went into executive session and a thorough discussion of certain phases of the medical economic problem was led by Dr. R. L. Sensenich, a member of the legislative committee of the American Medical Association.

#### Second Meeting

The second meeting of the House of Delegates, a breakfast meeting, was held in the Chateau Room of the Claypool Hotel, Indianapolis, on Thursday, October 11, 1934. The meeting was called to order at 7:15 a. m.

Dr. George D. Miller, chairman of the Credentials Committee, called the roll, the attendance slips showing the following members present:

County	Delegates
Allen.....	S. P. Hoffman, Fort Wayne M. R. Lohman, Fort Wayne William C. Wright, Fort Wayne
Bartholomew.....	Maurice G. McKain, Columbus
Carroll.....	Charles M. Kennedy, Camden
Cass.....	George D. Miller, Logansport
Clinton.....	M. F. Boulden, Frankfort
Daviess-Martin.....	H. B. Lindsay, Washington
Dearborn-Ohio.....	E. L. Libbert, Lawrenceburg
DeKalb.....	W. W. Swarts, Auburn
Delaware-Blackford.....	T. R. Owens, Muncie
Elkhart.....	A. C. Yoder, Goshen
Fayette-Franklin.....	L. Neff Ashworth, Connorsville
Floyd.....	P. H. Schoen, New Albany
Fountain-Warren.....	Simeon Lambright, Covington
Fulton.....	A. E. Stinson, Rochester
Gibson.....	C. M. Clark, Oakland City
Grant.....	Russell W. Lavengood, Marion
Hancock.....	Jesse E. Ferrell, Fortville
Harrison.....	William E. Amy, Corydon
Hendricks.....	W. J. Fuson, Coatesville
Henry.....	Walter M. Stout, Newcastle
Jackson.....	C. H. Ruch, Brownstown
Jasper-Newton.....	A. R. Kresler, Rensselaer
Jefferson.....	Anna Goss, Madison
Johnson.....	Walter L. Porteus, Franklin
Kosciusko.....	G. E. Thomas, Leesburg
Lake.....	C. R. Pettibone, Crown Point J. R. Pugh, Hammond J. M. White, Gary
LaPorte.....	J. N. Kelly, LaPorte
Lawrence.....	J. D. Byrns, Mitchell
Madison.....	J. R. Tracy, Anderson
Marion.....	E. O. Asher, New Augusta Max A. Bahr, Indianapolis Raymond C. Beeler, Indianapolis G. J. Clark, Indianapolis W. F. Kelly, Indianapolis Ralph L. Lochry, Indianapolis Herman G. Morgan, Indianapolis O. W. Sicks, Indianapolis Chester A. Stayton, Indianapolis
Marshall.....	T. C. Eley, Plymouth
Montgomery.....	T. Z. Ball, Crawfordsville
Orange.....	George Dillingier, French Lick
Parke-Vermillion.....	F. G. Greene, Bloomington
Posey.....	William B. Challman, Mt. Vernon
Rush.....	C. C. Atkins, Rushville
St. Joseph.....	J. A. Abel, South Bend A. S. Giordano, South Bend M. D. Wygant, Mishawaka
Shelby.....	Bayard Keeney, Shelbyville



Sullivan.....	J. T. Oliphant, Farmersburg
Tippecanoe.....	Gordon A. Thomas, Lafayette
	Earl Van Reed, Lafayette
Vanderburgh.....	Herman M. Baker, Evansville
	Gardner C. Johnson, Evansville
Vigo.....	C. L. Luckett, Terre Haute
	O. R. Spigler, Terre Haute
Wabash.....	O. G. Brubaker, Wabash
Washington.....	Donald Colglazier, Salem
Wayne-Union.....	Will Thompson, Liberty
Whitley.....	Paul A. Garber, South Whitley

## COUNCILORS

1st District .....	J. H. Hare, Evansville
	I. C. Barclay, Evansville
	(Councilor-elect)
2nd District .....	H. C. Wadsworth, Washington
3rd District .....	H. C. Ragsdale, Bedford
4th District .....	H. P. Graessle, Seymour
5th District .....	O. O. Alexander, Terre Haute
6th District .....	Samuel Kennedy, Shelbyville
7th District .....	L. A. Ensminger, Indianapolis
9th District .....	F. T. Romberger, Lafayette
10th District .....	E. M. Shanklin, Hammond
11th District .....	George D. Miller, Logansport
12th District .....	E. M. VanBuskirk, Fort Wayne
13th District .....	W. B. Christophel, Mishawaka

## PAST PRESIDENTS

W. N. Wishard, Indianapolis  
W. H. Stemm, North Vernon  
W. R. Davidson, Evansville  
Charles N. Combs, Terre Haute  
F. W. Gregor, Indianapolis  
G. R. Daniels, Marion  
Charles E. Gillespie, Seymour  
A. C. McDonald, Warsaw  
A. B. Graham, Indianapolis  
F. S. Crockett, Lafayette

## OFFICERS

E. E. Padgett, Indianapolis, President  
W. J. Leach, New Albany, President-elect  
A. F. Weyerbacher, Indianapolis, Treasurer  
T. A. Hendricks, Indianapolis, Executive Secretary

## DELEGATES TO THE A. M. A.

D. F. Cameron, Fort Wayne  
H. G. Hamer, Indianapolis

THE CHAIRMAN: Our next order of business is the election of officers. There is to be elected a president-elect, a treasurer and delegates to the American Medical Association. Nominations are now in order for president-elect.

## ELECTION OF OFFICERS

## PRESIDENT-ELECT

Dr. A. S. Giordano nominated Dr. R. L. Sensenich of South Bend; nomination duly seconded. Dr. Miller moved that if there were no other nominations that the nominations be closed and the secretary be instructed to cast the unanimous vote of the House for Dr. Sensenich. Motion seconded by Dr. Romberger. Ballot cast by executive secretary.

Upon the motion of Dr. Miller, duly seconded, and carried, the chairman appointed a committee consisting of Dr. Christophel, Dr. Giordano, Dr. Wygant and Dr. Crockett to notify Dr. Sensenich.

## TREASURER

Dr. C. J. Clark nominated Dr. A. F. Weyerbacher to succeed himself; seconded. Moved, seconded and carried that the nominations be closed and that the secretary cast the vote of the House for Dr. Weyerbacher for treasurer of the Indiana State Medical Association. Ballot cast by the executive secretary.

The Chairman introduced Dr. Sensenich, the president-elect for 1935.

DR. R. L. SENSENICH: You are much too busy to listen to a speech, and I haven't any speech. I just want to tell you collectively what I would like to say to each of you individually. I am very deeply conscious of having been elected to the highest gift of the Indiana society. I recognize very fully that it is not alone an honor but it carries also a responsibility. I only hope that I can live up to those responsibilities. I can only promise you that I will do the best

I can. . . . When my time comes to assume responsibilities I will count on your giving me that assistance.

## DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

Dr. W. F. Kelly nominated Dr. H. G. Hamer, of Indianapolis, to succeed himself. Seconded. Dr. Romberger moved that the nominations be closed and that the secretary cast the ballot for Dr. Hamer to succeed himself; motion seconded and carried. Ballot cast by the secretary.

Dr. O. O. Alexander nominated Dr. R. L. Sensenich, of South Bend, to succeed himself; seconded. Dr. George Dillinger moved that the nominations be closed and that the secretary cast the unanimous vote of the House for Dr. Sensenich to succeed himself; motion seconded and carried. Ballot cast by the secretary.

Dr. Hamer and Dr. Sensenich were elected for a period of two years.

## ALTERNATES TO THE AMERICAN MEDICAL ASSOCIATION

Upon motions by Dr. Romberger and Dr. E. M. VanBuskirk, Dr. W. F. Kelly, of Indianapolis, and Dr. E. M. Shanklin, of Hammond, were placed in nomination to succeed themselves. Seconded. Motion made that the nominations be closed and that the secretary cast the unanimous vote of the House for Dr. Kelly and Dr. Shanklin for alternate delegates to the American Medical Association for a period of two years to succeed themselves; motion seconded and carried. Ballot cast by the executive secretary.

## ELECTION OF COUNCILORS

The chair announced that the resignation of Dr. John Hare, whose term would have expired December 31, 1935, had been accepted and it would be necessary to elect a successor to Dr. Hare for the interim between this time and the expiration of his term of office.

Dr. Herman Baker nominated Dr. I. C. Barclay, of Evansville, to fill the unexpired term of Dr. Hare as councilor of the First District; nomination seconded by Dr. Davidson. As there were no other nominations the chair declared Dr. I. C. Barclay elected councilor of the First District to fill the unexpired term of Dr. Hare.

Election of the following councilors was confirmed:

Third District.....H. C. Ragsdale, Bedford  
Sixth District.....Samuel Kennedy, Shelbyville  
Ninth District.....F. T. Romberger, Lafayette  
Twelfth District.....E. M. VanBuskirk, Ft. Wayne

## SELECTION OF CITY FOR 1935 MEETING

Dr. E. M. Shanklin extended the invitation of the Lake County Medical Society to the Indiana State Medical Association to hold its 1935 meeting in Gary. On motion of Dr. George Miller, seconded by Dr. E. M. VanBuskirk, the invitation was unanimously accepted.

## TIME OF 1935 MEETING

The chairman asked if the present arrangement as to time for the annual session was satisfactory or if the delegates wished to move the meeting time back to the former September dates or forward a little later. It was unanimously agreed that the October dates selected for this year's meeting are very satisfactory.

THE CHAIRMAN: I have here an additional report from the Bureau of Publicity which Mr. Hendricks will read at this time:

"Whereas, Organized medicine in keeping with its traditional solicitude for the public health in the field of preventive medicine, and

"Whereas, The mounting toll of traffic accidents resulting in an appalling record of deaths and serious injuries, a considerable number of which are caused by well known traffic hazards which have been allowed to remain in our public highways and streets,

"Therefore, Be it Resolved, That the Indiana State Medical Association, through its House of Delegates, acutely conscious of its responsibility in the field of preventive medicine, initiate an active cooperation with other safety agencies for the elimination of all unwarrantable traffic hazards, and

"Be it Further Resolved, That a committee be appointed to formulate practical plans for the participation of the State Association in a movement to reduce the menace to life and health in traffic accidents."

Referred to the Reference Committee on Hygiene and Public Health.

## REPORTS OF REFERENCE COMMITTEES

### REPORTS OF OFFICERS

House of Delegates,  
Indiana State Medical Association.  
Gentlemen:

After carefully considering the reports of your various officers we submit the following:

*President:* We wish to express our appreciation of the untiring efforts of President Padgett in furthering and safeguarding the interests of organized medicine and particularly those of this society during the past year. Attention is again called to the importance of our local county societies as agents best suited for postgraduate study.

*President-elect:* We enter another year with renewed vigor and determination from the encouragement and assurance brought to us by our president-elect.

*Executive Secretary:* We are again reminded of the excellent work of our executive secretary, Tom Hendricks, this year as in the past, with which work every member of this society should long since have been familiar.

*Treasurer:* The combined audit of the Association and JOURNAL has proved highly satisfactory and we feel should be continued.

*Council:* The report of the Council shows that the various councillor districts have been unusually active.

*Executive Committee:* The report of the executive committee shows an activity rarely evidenced in the past. While it is impossible to comment on the numerous measures carried out, we wish to call attention to the prompt and timely action in regard to the physician's relationship to the FERA; in keeping the diphtheria immunization in the hands of the profession; its action in condemning the Milbank Foundation and other social service rackets; in censuring the American College of Surgeons' advocacy of state medicine; its results in obtaining recognition of Indiana members on A. M. A. committees; in sending a representative to our neighbor State of Illinois which proved so beneficial that we recommended extending its scope to include other neighboring states.

*Statistician and Historian:* The work of the newly created offices of statistician and historian has been very commendable and has been very favorably received.

M. R. LOHMAN, *Chairman.*  
M. C. MCKAIN.  
J. E. FERRELL.  
W. E. THOMAS.  
M. L. MCCLAIN.

On motion of Dr. Lohman, seconded by Dr. Miller, the report was adopted.

### SECTIONS AND SECTION WORK

DR. E. O. ASHER: The only thing which came before our committee was the resolution regarding the creation of a section on anesthesia.

House of Delegates,  
Indiana State Medical Association.  
Gentlemen:

The Indiana State Board of Medical Registration and Examination has rendered a ruling to the effect that administering an anesthetic is in deed and fact medical practice. This decision has been upheld by the State of Indiana and the hospitals of the state have been notified and asked to comply with the aforesaid ruling. It is believed that this move is for the benefit of the public weal and for the good of the medical profession at large.

A group of physicians who have been practicing in whole or in part the specialty of anesthesia for a number of years have petitioned the House of Delegates of the Indiana State Medical Association for the privilege of organizing a section of anesthetists. We feel that this body of men should have the support of the Indiana State Medical Association. How-

ever, the practice of medicine revolves about the general practitioner, and basically is divided into two groups—medicine and surgery. To further divide the general interest of the state meeting by the creation of more sections at this time is questionable. At the present time there is so much confusion existing in the handling of sections and until some definite plan is worked out, this committee feels that it is unwise to create any more sections. We recommend that a committee be appointed by the President to study the advisability of the creation of more sections.

JOHN H. GREEN, *Chairman.*  
RAYMOND C. BEELER.  
E. O. ASHER.  
C. E. MUNK.  
L. W. VEACH.

Dr. Asher moved the adoption of this report. Motion seconded.

Dr. Romberger made the motion that the paragraph relating to the non-formation or postponement of the creation of a section on anesthesia at the present time be stricken out of the report of the Reference Committee on Sections and Section Work and that the following paragraph be inserted:

"The committee recommends that this House of Delegates go on record as authorizing the necessary change in the By-Laws to permit the immediate organization of a Section on Anesthesia."

Motion seconded by Dr. Alexander.

Dr. W. R. Davidson discussed the matter, saying that he believed "the anesthetists of the state are fully warranted in their position."

DR. W. F. KELLY: I rise to a point of order in regard to Dr. Romberger's motion. In this committee report nothing was said regarding the By-Laws. I think his motion should be made to affect only the committee report.

DR. ROMBERGER: The report is from the Committee on Sections. The Committee on Sections can ask the House to authorize whatever the majority sentiment of the House rules. The Committee on Sections can ask whether or not the House wants this change made.

After further discussion by Dr. F. S. Crockett and Dr. Asher, the secretary was asked to read the amendment to the report of the Committee on Sections and Section Work which follows:

"The committee recommends that this House of Delegates go on record as authorizing the necessary change in the By-Laws to permit the immediate organization of a Section on Anesthesia."

On voting, the motion to substitute the foregoing sentence for the last four sentences in the committee's report was carried.

### RULES AND ORDER OF BUSINESS

DR. J. T. OLIPHANT: As no business was referred to this committee we have no report to make at this time.

### MEDICAL EDUCATION AND HOSPITALS

House of Delegates,  
Indiana State Medical Association.  
Gentlemen:

Your Reference Committee on the report of the Committee on Medical Education and Hospitals recognizes that it is not in the power of this Reference Committee to submit an original report. However, in this connection, the question arises whether or not it is possible or desirable to create a sentiment toward lowering the cost of hospital service, hospital administration and professional nursing service. To accomplish these results, it seems, will be one of the readjustments that will help to stem the tide of state medicine and health insurance.

With this comment your Reference Committee approves the report of the Committee on Medical Education and Hospitals and moves its adoption.

The Reference Committee on Medical Education and Hospitals approves the report of the Committee on Graduate Education and moves its adoption.

### RESOLUTION

Whereas, The American Medical Association has officially recognized existing national examination boards in certain



specialties, and has approved and assisted in the formation of national examining boards in other specialties, whose official duty shall be to examine applicants and certify those qualified, and has set up a governing board for the correlation of activities by the individual boards,

*Be it Resolved*, That the House of Delegates of the Indiana State Medical Association in session, this ninth day of October, 1934, record its approval of this effort on the part of the American Medical Association to elevate the standard of professional work in the medical specialties.

Approved by—

Marion County Medical Society.

The Reference Committee on Medical Education and Hospitals approves the proposed plan and moves adoption of the above resolution.

O. G. BRUBAKER, *Chairman*.

W. L. PORTTEUS.

A. C. YODER.

C. N. COMBS.

W. R. DAVIDSON.

Dr. Brubaker moved the adoption of this report as a whole; motion seconded, and carried.

#### PUBLIC POLICY AND LEGISLATION

House of Delegates,  
Indiana State Medical Association.  
Gentlemen:

Your Reference Committee on Public Policy and Legislation approves for adoption the reports of the following standing committees:

Committee on Public Policy and Legislation

Committee on Civic and Industrial Relations

Committee on Study of Health Insurance

Committee on Veterans' Hospitalization

Public Relations Committee

The committee recommends for adoption the resolution and suggestions relative to reform in the matter of expert testimony submitted by the delegates of the Indianapolis Medical Society.

The committee approves for adoption the resolution introduced by Dr. B. G. Kenney with the changes indicated:

(The words in parentheses have been stricken from the resolution and underlined word outside of parentheses have been inserted.)

*"Resolved*, That the Indiana State Medical Association shall recommend that the State Legislature, (at its next session shall) so word the Indiana Medical Practice Acts that the State Board of Medical Registration (shall) may accept from candidates for licensure, a certificate of successful examination issued by the National Board of Medical Examiners."

C. E. GILLESPIE, *Chairman*.

JON KELLY.

M. A. AUSTIN.

GEORGE DILLINGER.

R. L. LOCHRY.

Dr. Gillespie moved the adoption of this report. Motion seconded. Dr. Davidson objected to the resolution contained in the report on the grounds that now is not the opportune time to tamper with the Medical Practice Act.

Dr. GEORGE DILLINGER: In considering this resolution the committee took recognition of the fact that the next session of the legislature might not be the proper time to introduce this change in the law. "At the next session" was stricken from the resolution. I move to amend the report of the committee by striking "at the next session" from the report. (Motion seconded by Dr. George D. Miller.)

Dr. DAVIDSON: I would like to move to amend by striking out that whole section of the report. (Motion seconded.)

The resolution was discussed by Dr. S. P. Hoffman, Dr. D. F. Cameron, and Dr. B. G. Keeney.

Dr. DILLINGER: I would like to have the secretary read that section again. That section protects the Indiana Board and gives it the privilege of rejecting the National Board

examinations at any time it sees fit. On the other hand it gives it the privilege of accepting applicants that have been passed by the National Board without going through the formality here in Indiana.

The secretary read the resolution as carried in the report of the Reference Committee on Public Policy and Legislation, which follows:

*"Resolved*, That the Indiana State Medical Association shall recommend that the State Legislature so word the Indiana Medical Practice Act that the State Board of Medical Registration may accept from candidates for licensure a certificate of successful examination issued by the National Board of Medical Examiners."

THE CHAIRMAN: The first vote will be on Dr. Davidson's amendment to strike out the entire paragraph.

(On a rising vote the motion to strike out the entire resolution was carried.)

#### PUBLICITY

Dr. O. R. Spigler, chairman of this committee, reviewed the report of the Bureau of Publicity as printed in the handbook, enumerating the many duties and accomplishments of the Bureau since its formation in 1922, and particularly in the past year. He paid tribute to Dr. William N. Wishard for his valuable work in organizing the Bureau and for the many hours and the effort he had given to the work of the Bureau.

Dr. Spigler stressed particularly the historical work of the Bureau, quoting from the Bureau's report as follows:

"Starting with January, 1935, the historian of the Association will have short articles of historical value in THE JOURNAL from time to time. Any information of historical interest should be sent either directly to the historian or to the Bureau of Publicity.

"Interest in the history of medicine in Indiana has been on the increase and during the past year a number of county societies have, on their own initiative or at the suggestion of the Bureau, appointed a special committee of the county to compile historical data of local medical interest and to prepare a pamphlet on that subject. Several articles on medical history have appeared in THE JOURNAL written by authors other than the state historian, the merit of which the Bureau wishes to commend."

Your committee recommends the acceptance and adoption of this report as found in the handbook.

The report of the State Fair Committee as it appears in the handbook is recommended for acceptance and adoption.

O. R. SPIGLER, *Chairman*.

M. F. BOULDEN.

C. A. STAYTON.

T. R. OWENS.

RUSSELL LAVENCOD.

Dr. Spigler moved the adoption of all sections of this report; motion seconded by Dr. Miller, and carried.

#### HYGIENE AND PUBLIC HEALTH

House of Delegates,  
Indiana State Medical Association.  
Gentlemen:

Your committee unanimously favors the adoption of the resolution contained in the supplemental report of the Bureau of Publicity, and the additional report of the Bureau of Publicity.

We recommend the adoption of the report of the Committee on Lye Burns in Children and suggest that the pamphlet mentioned in this report be prepared for publication immediately.

We recommend the adoption of the report of the Committee on the Study of Puerperal Mortality and wish especially to recommend that the Association take particular note of the suggestion regarding the instruction of the child-bearing public of each county in regard to the large part of its responsibility for puerperal mortality.

We recommend the adoption of the report of the Committee on Mental Health and suggest that this work be continued.

We recommend the adoption of the report of the Committee on Diphtheria Prevention.

We recommend the adoption of the report of the Committee on the Study of High School Athletics.

C. J. CLARK, *Chairman*.  
SAMUEL KENNEDY.  
WALTER M. STOUT.  
M. D. WYGANT.  
H. P. GRAESSLE.  
HERMAN G. MORGAN.

On motions duly made and seconded the various sections of this report were approved and on motion of Dr. Clark, duly seconded, the report as a whole was adopted.

#### AMENDMENTS TO CONSTITUTION AND BY-LAWS

House of Delegates,  
Indiana State Medical Association.  
Gentlemen:

In regard to the report of the Committee on Revision and Codification of the Constitution and By-Laws, this report is approved with the following corrections at the request of this committee:

Article IX, Section 1, of the Constitution should read as follows:

"The officers of this Association shall be a President, a President-elect, an Executive Secretary, a Treasurer, and thirteen councilors, each of whom shall be a member, except the Executive Secretary, who need not necessarily be either a physician or a member."

Chapter XII, Section 16, should read:

"Medical defense as provided for by this Association shall be available to members under the terms stated in these By-Laws, only in the defense of civil action for alleged malpractice, and shall not be available if such alleged malpractice occurred when the member was under the influence of any intoxicant or narcotic while rendering the service in question."

There appears to be a conflicting statement in new article VI of the Constitution which we think should be carefully considered before final adoption. It is in regard to the Council.

"That it shall not make changes in the laws governing the Association, nor exercise legislative functions."

In the By-Laws is the statement of the duties of the Council; some of these duties might be placed under legislative functions. We suggest that after the word "functions" be added "Except as stated in the By-Laws."

W. F. KELLY, *Chairman*.  
F. W. CREGOR.  
GEORGE DANIELS.  
WILL THOMPSON.  
W. M. VARBLE.

DR. KELLY: The committee disapproved the amendment to By-Law, Chapter III, Section 1, offered by Dr. Romberger, but as the House recommends that it be passed, we will recommend that it be passed. There was one thing stricken out with the consent of the committee—that was that the officer had to be a man in regular practice. I move the adoption of this report as a whole. Seconded, and carried.

#### CREDENTIALS

House of Delegates,  
Indiana State Medical Association.  
Gentlemen:

Your Committee on Credentials moves the adoption of the report as printed in THE JOURNAL of the Indiana State Medical Association.

PAUL A. GARBER, *Chairman*.  
MAX BAHR.  
C. L. LUCKETT.  
P. H. SCHOEN.  
K. L. HULL.

Moved by Dr. Garber that the report be adopted; motion duly seconded, and carried.

#### MISCELLANEOUS BUSINESS

House of Delegates,  
Indiana State Medical Association.  
Gentlemen:

We recommend the adoption of the reports of the Committee on Necrology and the Committee on Secretaries' Conference as published in the Handbook of the House of Delegates.

In reference to the resolution regarding a permanent home for the State Association, the committee feels that this is essentially a problem for the Indianapolis Medical Society. The offices of the Indiana State Medical Association and THE JOURNAL are executive offices and are well housed.

The sum of money in the treasury referred to in the resolution would be insignificant when applied on the purchase of real estate and building and is vitally needed as an emergency fund.

The committee suggests that if the Indianapolis Medical Society acquire such property as is described that this House consider renting space in such building to be used as offices for the Indiana State Medical Association and THE JOURNAL.

The committee recommends that no action be taken on this resolution at this time.

HERMAN BAKER, *Chairman*.  
W. E. AMY.  
C. M. CLARK.  
L. N. ASHWORTH.  
A. R. KRESLER.

Dr. Baker moved the adoption of this report; motion seconded, and carried.

DR. F. S. CROCKETT: As the State Association has been the guest and received most wonderful entertainment at the hands of the Indianapolis Medical Society and as we have been accorded most generous treatment by the press, and in appreciation of the tremendous amount of work and energy and enthusiasm that our retiring president has put into his job this year, I move you, Mr. President, that the secretary be instructed to formulate proper messages of appreciation and convey to these respective individuals of the Association and the press, the appreciation of the Indiana State Medical Association. (Motion seconded, and carried.)

Upon the motion of Dr. E. M. Shanklin, Dr. A. M. Mitchell, of Terre Haute, chairman of the Secretaries' Conference Committee, received the unanimous consent of the House of Delegates to appear before it, at which time he made a statement in regard to the Milbank Fund.

THE CHAIRMAN: Here is a telegram from Dr. Berteling:

"With regrets that I am unable to be present at the meeting and with appreciation of your remembrance of a long past honor I send greetings to all the members of the State Medical Association.

John B. Berteling, President-elect, 1903."

THE PRESIDENT: Now, gentlemen, when I took over the duties of this office on January 1, 1934, I thought I knew this body of men. I knew your names, your faces, your districts, and in most cases your towns, and I thought I knew the class of men I was working with. Now, at the end of the most enjoyable year I have ever spent, I wish to say that I never knew that there could be such cooperation in a group of medical men as I have found. I have traveled over the state. I have said whatever I have thought it was necessary to say. I have written in THE JOURNAL what I thought should be written. Out of three thousand members I have heard one kick; that wasn't sent directly to me. . . . I simply ask that you men take to Dr. Leach the same cooperation that you have given me. Once more I thank you for all you have done for me in the past year.

There being no further business, we will stand adjourned.

The House of Delegates of the Indiana State Medical Association adjourned *sine die*.

#### GENERAL MEETINGS

Wednesday, October 10

The first General Meeting convened at nine o'clock on the morning of October tenth, the President, Dr. E. E. Padgett, of Indianapolis, presiding.

Dr. H. S. Leonard, Indianapolis, extended a welcome on behalf of the Indianapolis Medical Association.

DR. H. S. LEONARD: Mr. President, Members of the Indianapolis State Medical Association, and Guests: In behalf of the Indianapolis Medical Society I extend to you a most hearty welcome. We are prepared, through Dr. Carmack, our General Chairman, and his many committees, to help you make



the most of your short stay in Indianapolis. Different kinds of entertainment have been provided to suit individual tastes. The scientific program, with its many noted speakers, I am sure will appeal to you.

We hope that our hospitality and entertainment will meet with your approval to the extent that you will be glad to come to visit us again.

Dr. Walter J. Leach, of New Albany, President-elect, presided while the President, Dr. E. E. Padgett, read his address, entitled "The State Medical Association as a Factor in Education."

Dr. David Wallace Mackenzie, Clinical Professor of Urology, McGill University Faculty of Medicine, Montreal, Quebec, read a paper entitled "Mechanical Factors in Renal Infections."

Dr. Isidor S. Ravdin, Professor of Surgery, University of Pennsylvania School of Medicine, Philadelphia, read a paper entitled "Problems of Acute Appendicitis."

Dr. Robert A. Strong, Professor of Pediatrics, Tulane University of Louisiana School of Medicine, New Orleans, read a paper entitled "Erythroblastic Anemia of Childhood."

Dr. Emil Novak, Associate Professor of Gynecology, Johns Hopkins Medical School, Baltimore, presented the subject "Endocrine Aspects of Gynecology."

The Wednesday morning session adjourned.

#### Thursday, October 11

The second General Meeting convened at nine o'clock on the morning of Thursday, October eleventh, Dr. Walter J. Leach in the Chair.

Dr. Lucius E. Burch, Professor of Clinical Gynecology, Vanderbilt University School of Medicine, Nashville, Tennessee, read a paper entitled "The Diagnosis and Treatment of Uterine Bleeding."

Dr. Walter M. Simpson, Director, Diagnostic Laboratories, Miami Valley Hospital, Dayton, Ohio, read a paper entitled "Undulant Fever (Brucellosis)."

Dr. Ralph A. Fenton, Clinical Professor and Head of the Department of Otolaryngology, University of Oregon Medical School, Portland, Oregon, read a paper entitled "Modern Views About Nasal Infection."

Dr. George R. Minot, Professor of Medicine, Harvard University Medical School, Boston, presented the subject "Some Aspects of Anemia."

Dr. E. E. PADGETT: I have now the very great pleasure of presenting Dr. James S. McLester, President-elect of the American Medical Association. He has been kind enough to stay over to attend our meeting this morning, and I want to give all of you the same opportunity of getting acquainted with him that we had last night. I will ask him to say a few words to us at this time.

Dr. JAMES S. McLESTER (Birmingham, Alabama): I had not expected to be called on this morning. I think most of you heard all I could say last night. I think Dr. Padgett wants me to say something about the American Medical Association, and perhaps something about the thing that interests all of us as physicians today—medical economics.

Very few of us know whither we are tending. That applies not only to the practice of medicine, but also to all other social and economic relationships. But of one thing I am certain, and I am sure all of the officers of the American Medical Association feel the same, that is, that for the man of character who is a well trained internist the world will always find a place of dignity and a suitable reward—not necessarily as a cog in a piece of machinery, but as a physician who maintains an intimate and distinctly personal relationship with his patients. I think the students of sociology who are endeavoring to guide the trend of medical practice have entirely lost sight of one thing. The imagination of these men has been caught by the group clinic, a place where a patient could go and on request be intensively studied by specialists each along his own line of work. Their imagination has been fired by that. They do not know, or they forget, that today we do not study simply the patient's organs and treat those organs; we study the patient as a man or woman and treat them as men and women. The group clinics have their place, a very important place; but they cannot take the place of the well-trained practitioner, the man who has a

good education back of him, who has character, whose senses are well trained, who has learned to observe and has learned to reason from his observations, and who has a sympathetic interest in his patients. Nothing can take the place of that. The American Medical Association is bending every effort to see that this personal relationship between physician and patient shall be maintained in the future.

Sir Frederick Banting, K. C. B. E., Professor of Medical Research, University of Toronto Faculty of Medicine, Toronto, Ontario, read a paper entitled "Silicosis."

At this time Mr. Thomas A. Hendricks, Executive Secretary of the Association, read the following telegram to be sent, on approval by the members, to President Roosevelt:

October 11, 1934.

Honorable Franklin D. Roosevelt,  
President of the United States:

The Indiana State Medical Association, now in annual session, would respectfully suggest that the Commission recently appointed by you to study the question of economic security of the American people, consult with and call upon the organized medical profession of this country for facts and figures that the American Medical Association now has in its possession if and when the Commission considers the question of sickness with relation to the general problem of economic security of the American people.

By the Executive Committee,

Indiana State Medical Association.

THE PRESIDENT: The Executive Committee would like to have action taken by this meeting concerning this telegram to be sent to the President. What is your pleasure—shall it be sent?

On motion, duly seconded, the sending of the above telegram was approved.

Dr. Frank H. Lahey, Boston, presented the subject "The Diagnosis and Management of Thyroid States."

THE PRESIDENT: I wish to take this opportunity to thank all of you for what you have done to make this meeting a success.

Immediately upon adjournment of this session the Eli Lilly Company have a fleet of taxis to take us to their plant, where we will have lunch and then attend the dedication ceremonies in connection with their new research laboratories.

As you know, our next meeting will be in Gary in 1935. I hope to see you all at that time.

The Indiana State Medical Association adjourned *sine die*.

#### MINUTES OF THE MEETING OF THE SECTION ON SURGERY

The Section on Surgery convened at 2:10 on the afternoon of Wednesday, October tenth, the Chairman, Dr. H. C. Ragsdale, of Bedford, presiding.

Dr. R. B. Smallwood, Bedford, read a paper entitled "Hernia Through the Foramen of Winslow." Discussed by Dr. John R. Phillips, Michigan City.

Dr. J. F. Wynn, Evansville, read a paper entitled "Pelvis Varicosities." No discussion.

Dr. R. C. Ottinger, Indianapolis, read a paper entitled "Vaginal Hysterectomy." Discussed by Dr. T. B. Noble, Jr., Indianapolis.

Election of officers resulted as follows:

Chairman, Don Cameron, Fort Wayne.

Vice-Chairman, W. C. Moore, Muncie.

Secretary, George Green, South Bend.

Dr. W. C. Moore, Muncie, read a paper entitled "Thoracic Surgery." Discussed by Dr. J. H. Stygall, Indianapolis.

Dr. Lyman K. Gou'd, Fort Wayne, read a paper entitled "Gallbladder Disease Simulating Angina Pectoris." Discussed by Dr. Robert M. Moore, Indianapolis.

Dr. Harold Trusler, Indianapolis, read a paper entitled "Results in Plastic and Reconstructive Surgery." Discussed by Dr. E. L. Lingeman, Indianapolis.

The Section on Surgery adjourned.

### MINUTES OF THE MEETING OF THE MEDICAL SECTION

The meeting of the Section convened at 2:00 o'clock Wednesday, October tenth, the Chairman, Dr. C. J. Clark, of Indianapolis, presiding.

Dr. Russell S. Henry, Indianapolis, read a paper entitled "Recent Advances in the Treatment of Pulmonary Tuberculosis."

Dr. Foster J. Hudson, Indianapolis, read a paper entitled "The New-Born Infant: Its Hazards and Care."

These two papers discussed by Drs. George R. Douglas, Vaparaíso, G. B. Wilder, Anderson, and B. M. Taylor, Portland.

Dr. Harold D. Lynch, Evansville, read a paper entitled "Fundamentals of Infant Feeding."

Dr. J. A. Parramore, of Crown Point, read a paper entitled "Diagnosis of Chronic Non-Tuberculous Lung Infections."

These two papers discussed by Drs. John H. Reed, Logansport, Russell S. Henry, Indianapolis, and E. M. Amos, Indianapolis.

Election of officers resulted as follows:

Chairman, B. S. Cornell, Fort Wayne.

Vice-Chairman, A. S. Giordano, South Bend.

Secretary, Walter L. Porteus, Franklin.

Dr. O. A. Turner, Madison, read a paper entitled "The Nervous Patient."

Dr. C. A. Bishop, South Bend, read a paper entitled "Value of Radioscopy in Heart Disease."

Dr. H. L. Murdock, Fort Wayne, read a paper entitled "Influence of Medicine on Life Expectancy."

Dr. Allen C. Nickel, Bluffton, read a paper entitled "Value of Oxygen Therapy in Medicine."

These four papers discussed by Drs. J. A. Parramore, Evansville, C. B. Bohner, Indianapolis, and C. J. Clark, Indianapolis.

Meeting adjourned.

### MINUTES OF THE MEETING OF THE SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY

The Section on Ophthalmology and Otolaryngology convened at 2:10 p. m., October tenth, 1934, in a special room on the ninth floor of the Claypool Hotel, Indianapolis, with the chairman, Dr. J. R. Gillum, Terre Haute, presiding.

The following papers were read:

"Allergy in Otolaryngology," by K. L. Craft, M. D., Indianapolis. Discussed by J. W. Carmack, Indianapolis; F. V. Overman, Indianapolis; C. H. McCaskey, Indianapolis; E. N. Kime, Indianapolis; and Dr. Craft, closing.

"Ophthalmologic Aspect of Allergy," by B. J. Larkin, M. D., Indianapolis. Discussed by Drs. E. M. Shanklin, Hammond; W. F. Hughes, Indianapolis; Bennett Kraft, Indianapolis; and Dr. Larkin, closing.

"Malignancy Engrafted on Actinomycosis: Case Report," by F. McKay Ruby, M. D., Union City. Discussed by Dr. C. G. Culbertson, Indianapolis.

"Etiology and Treatment of Iritis," by B. W. Egan, M. D., Logansport. Discussed by Drs. C. J. Adams, Kokomo, D. O. Kearby, Indianapolis; Bennett Kraft, Indianapolis, and Dr. Egan, closing.

"Treatment of Laryngeal Tuberculosis," by W. E. Stewart, M. D., Terre Haute. Discussed by Dr. D. O. Kearby, Indianapolis, and Dr. Stewart, closing.

"Morax-Axenfeld Conjunctivitis," by Robert Smith, M. D., Crawfordsville. Discussed by Dr. C. A. Robinson, Frankfort, and Dr. Smith, closing.

Officers were elected as follows:

Chairman, B. J. Larkin, M. D., Indianapolis.

Vice-Chairman, E. M. Shanklin, M. D., Hammond.

Secretary (re-elected), Raymond Calvert, M. D., Lafayette.

The Section on Ophthalmology and Otolaryngology adjourned at 5:30 p. m.

### COUNTY SOCIETY REPORTS

BOONE COUNTY MEDICAL SOCIETY members met at Lebanon, October second, with Dr. O. C. Higgins, Lebanon, as principal speaker. Dr. Higgins' subject was "Encephalitis." Ten members were present. This society now is working on the organization of a credit rating bureau.

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CARROLL COUNTY MEDICAL SOCIETY members met at Flora, October twelfth, to hear Dr. Thomas Noble, Jr., of Indianapolis, discuss "Cancer of the Cervix." Fourteen members were present.

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CASS COUNTY MEDICAL SOCIETY members met at Walton, September twenty-first, to hear Dr. E. A. Spohn, of Walton, discuss "Public Health in Cass County." Attendance numbered thirty.

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DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY met at Muncie, September eighteenth, to discuss encephalitis. Dr. H. E. Bibler gave a summary of the literature, and other physicians joined in the discussion. The October sixteenth meeting was held in Muncie. Dr. T. R. Owens reported the proceedings of the House of Delegates of the annual state meeting.

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ELKHART COUNTY MEDICAL SOCIETY met at the Hotel Elkhart, Elkhart, September sixth, for a dinner meeting. Dr. Herman L. Kretschmer, of Chicago, was the principal speaker. Attendance numbered thirty-eight. At the meeting held in Elkhart, October fourth, Drs. David S. Beilin and Nelson M. Percy, of Chicago, discussed "Gastric and Duodenal Ulcers and Carcinoma of the Stomach" from clinical, roentgenologic and surgical viewpoints. Attendance numbered sixty-five.

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FORT WAYNE MEDICAL SOCIETY members enjoyed a dinner meeting at the Chamber of Commerce, Fort Wayne, September eighteenth, when Dr. Matthew Winters, Indianapolis, was the speaker. Forty-six members were present. The October second meeting was held at the Lutheran Hospital, with the program in charge of members of the staff. October sixteenth, Dr. Juan Rodriguez spoke on "Obstetrical Radiography." The Mead Johnson film "Physiology of Fertilization of the Human Female" was a feature of this meeting. Delegates to the state meeting reported.

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GIBSON COUNTY MEDICAL SOCIETY members met at Hotel Emerson, Princeton, October eighth. Dr. Jewett V. Reed, of Indianapolis, presented a paper on "Head Injuries."

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GRANT COUNTY MEDICAL SOCIETY members and physicians from seven surrounding counties heard an address by Dr. Quitman Newell, of St. Louis, at the clinic meeting held at the Grant County Hospital Nurses' Home, September twenty-sixth. Dr. Newell conducted a clinic in the afternoon; a dinner meeting was held at the Hotel Spencer, following which Dr. Newell presented an illustrated lecture on "Carcinoma."

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HENDRICKS COUNTY MEDICAL SOCIETY members met at Crawley's Hall, Danville, Indiana, September twenty-eighth, to hear Dr. Henshaw, of the Indiana Dental College, discuss the relation of medical and dental doctors. Fifteen were present. Dentists of the county were invited to attend the meeting.

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HENRY COUNTY MEDICAL SOCIETY held a meeting at the Henry County Hospital, September twenty-seventh, with twenty physicians and guests present. Drs. B. L. Harrison, George Wiggins, W. U. Kennedy and H. W. McDonald, all of Newcastle, presented discussions of "Infant Feeding, Intestinal Hemorrhage, Blood Counting," "Osteomyelitis," "Hernia," and "Peritoneal Cyst." This was a clinical meeting, with presentation of cases.



INDIANAPOLIS MEDICAL SOCIETY members heard a symposium on "Foreign Bodies in the Lungs" at the October second meeting, in the Athenaeum. Speakers were Dr. L. T. Meiks, who discussed symptoms and physical findings; Dr. C. W. Wright, whose subject was "Roentgenology"; and Dr. D. O. Kearby who talked about "Bronchoscopy." Discussants were Drs. Matthew Winters, R. C. Beeler and E. L. Lingeman. On October sixteenth, Dr. Maurice V. Kahler talked on "Hormones of the Menstrual Cycle," and Dr. J. N. Collins discussed "Radiation Treatment for Bleeding at the Menopause." Discussants were Drs. Carl Habich and E. D. Clark.

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JAY COUNTY MEDICAL SOCIETY members met at the Portland Country Club, October fifth. Dr. F. C. Walker, Indianapolis, was the speaker, his subject being "Gynecologic Aphorisms."

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LAWRENCE COUNTY MEDICAL SOCIETY held a dinner meeting at Bedford, October third. Motion pictures were shown by a representative of the Mead Johnson Company.

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MADISON COUNTY MEDICAL SOCIETY and dental society members were entertained September nineteenth, afternoon and evening, by the Reed Drug Company of Anderson; this meeting has become an annual function. A barbecue supper was provided for the seventy-five guests who were entertained. On October fifteenth the society members were guests of the Sisters of St. John's Hospital for dinner, following which Dr. L. H. Gilman, Indianapolis, presented an address on "Encephalitis" which was illustrated with motion pictures.

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MARSHALL COUNTY MEDICAL SOCIETY held the first meeting of the season, October third, at the Ross House in Plymouth. Dr. T. C. Eley led a discussion of surgical problems.

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MONROE COUNTY MEDICAL SOCIETY members held a dinner meeting at the Union Building, Bloomington, September eighteenth. Papers were presented by Drs. William Reed and Philip Holland, of Bloomington.

\* \* \*

PORTER COUNTY MEDICAL SOCIETY members met at the Hotel Lembke, Valparaiso, September twenty-fifth, to hear Dr. Sidney Portis, of Chicago, talk on "The Medical Management of Gall-Bladder Disease." Twenty members were present.

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RANDOLPH COUNTY MEDICAL SOCIETY members met at Union City, October eighth, with Dr. Louis H. Sagar, of Indianapolis, as speaker.

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SHELBY COUNTY MEDICAL SOCIETY members and guests numbering more than one hundred heard Dr. W. W. Bauer, director of the Bureau of Health and Public Education of the American Medical Association, when he talked at Shelbyville, October third. Dr. Bauer addressed high school students at a meeting in the afternoon, and at the dinner meeting in the evening. Dr. Bauer's subject was "Health of the School Child."

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ST. JOSEPH COUNTY MEDICAL SOCIETY met September twenty-seventh, in South Bend, to hear Dr. E. C. Rosenow, of the Mayo Clinic. His subject was "The Specificity of Streptococci." Seventy-one members and forty guests were present.

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TIPPECANOE COUNTY MEDICAL SOCIETY held its regular meeting in Lafayette, October sixteenth, at Lincoln Lodge. Speaker and clinician for the meeting was Dr. Harry E. Mock, of Chicago. His subject was "Management of Acute Head Injuries." A clinic was held at St. Elizabeth's Hospital in the afternoon.

VANDERBURGH COUNTY MEDICAL SOCIETY met at the Deaconess Hospital, Evansville, September eleventh, to hear Dr. Alvin E. Newman, who chose for his subject "New Practices in Urology." Other speakers were Dr. Robert Acre and Dr. William S. Ehrich. The meeting scheduled for October ninth was postponed until October twenty-fifth because of the state meeting, October ninth to eleventh.

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WHITLEY COUNTY MEDICAL SOCIETY members met at the Hicks Tavern in South Whitley, October second, for their regular monthly banquet meeting. Professor Eve, of the local high school, talked on the relationship of the medical profession to the school.

INDIANA STATE MEDICAL ASSOCIATION  
EXECUTIVE COMMITTEE

September 30, 1934.

Roll call showed the following present: H. H. Wheeler, M.D.; E. E. Padgett, M.D.; O. O. Alexander, M.D.; W. J. Leach, M. D.; A. F. Weyerbacher, M.D.; Albert Stump, attorney, and T. A. Hendricks, executive secretary. Guest, O. N. Torian, M.D. In the absence of Dr. William H. Kennedy, chairman, Dr. Padgett presided.

Membership Report

Number of members on September 30, 1934.....	2660
Number of members on September 30, 1933.....	2626
Gain over last year.....	34
Number of members on Dec. 31, 1933.....	2714

Actions Left Over from 1933 Session, French Lick

Codification of Constitution and By-Laws. Report of the committee appears in the September JOURNAL.

1934 Annual Session, Indianapolis

Dr. Sensenich's plan to contact labor and employers' groups concerning socialized medicine was brought to the attention of the Committee. Previously the Committee had received an outline of this plan.

(a) Pamphlet, "Dentistry Faces a Crisis," brought to the attention of the Committee. The Committee feels that as the contact plan develops it might be well to discuss this matter with a suitable committee of the dental society.

(b) Suggestion by Dr. Crockett and recommendations of the Committee on the Study of Health Insurance that the heads of various state organizations be invited to the State Association meeting brought to the attention of the Committee. The Committee felt that undoubtedly these contacts would be worthwhile but that some other time rather than the state meeting would afford a better time for developing these contacts.

Tuberculosis campaign plan presented by Dr. Torian. The Committee felt that this matter should go before the House of Delegates and that the plan could be brought before the House through one of the delegates. Although the Committee members as individuals commented favorably upon the plan, they did not feel that the Executive Committee as such should approve the plan but rather that any approval that is to be given should come only after the matter is considered by the House of Delegates.

Dr. F. S. Crockett is to make a formal report on his visit to the Illinois State Medical Society as a representative of the Indiana State Medical Association. Dr. Harold Camp, secretary of the Illinois Society, has been invited to attend the Indiana meeting.

The Committee instructed the executive secretary to send an invitation to Governor Paul V. McNutt to be the guest of the Association at the banquet, and to Mayor Reginald Sullivan to make an address of welcome at the general meeting.

The information that in Colorado a doctor who is not a member pays \$5.00 to register at the state meeting brought to the attention of the Committee. Interns, senior and junior medical students and guests receive invitations to participate in the meeting. Upon the motion of Dr. Alexander the Com-

mittee ruled that any physician residing in Indiana who is in active practice and is not a member of the Association should pay a registration fee of \$5.00. (Ineligibles, of course, cannot register under any circumstances.)

Resolutions of Indianapolis Medical Society. The Indianapolis delegation is considering presenting resolutions concerning the following to the House of Delegates:

(a) The establishment of a permanent home for the Association.

(b) Correcting the evils which now exist as a result of physicians giving conflicting expert testimony.

(c) Annual reregistration of physicians.

*Report on Annual State Secretaries' Conference, Chicago, September 21 and 22.*

(1) Secretary reported the fact that Indiana is recognized as having an active, functioning medical organization and as such the suggestions and words of Dr. Shanklin, editor of THE JOURNAL, and Dr. Sensenich were well received by the conference.

(2) Suggestions by Dr. C. L. Cummer, president of the Ohio State Medical Association, in regard to the scientific program brought to the attention of the Committee. The Committee instructed the secretary to turn over this material to Dr. A. M. Mitchell, chairman of the Secretaries' Conference Committee, asking him to work up a similar series of outlines for Indiana.

#### *Court Decision on Vaccination*

Clipping given to Albert Stump who is to get this decision and write it up for THE JOURNAL. Mr. Stump said that although he has written the court at Union City asking for this decision he has not yet received an answer.

#### *Undertakers' Preference Legislation*

Suggestion made that the present law which gives undertakers preference over doctors in the settlement of estates be changed. Mr. Stump is to make a report on this at the next meeting of the Executive Committee.

#### *FERA Work*

(1) Secretary reported that he is to have a meeting soon with Wayne Coy, new state relief director, in regard to the establishment of further rules which will be more equitable to the members of the medical profession and the public at large in regard to medical services rendered the indigent sick.

#### *The American Legion Plan*

Report on the suggested plan for the creation of a medical commission for the Department of Indiana of the American Legion made by the executive secretary. Due to the fact that Dr. Charles R. Bird, rehabilitation officer of the Department of Indiana of the American Legion, was opposed to many features of the suggested plan which is now in operation in Illinois, definite action in regard to this matter in Indiana was not forthcoming at the annual meeting of the Legion in Gary in August.

#### *Group Insurance*

The secretary reported that the following new companies had been formed:

(1) Aetna Underwriters Corporation and National Automobile Club.

(2) Friendly Mutual Benefit Association.

Reports on these two companies have been sent to each member of the Executive Committee and to the American Medical Association.

#### *Socialized Medicine*

Correspondence with the White House in regard to the President's talk at the Mayo Clinic showed to the committee. *Public Relations Committee of State Association*

Report upon this committee brought to the attention of the Executive Committee.

#### *Action of State Board of Medical Registration and Examination in Regard to Anesthetists*

Ruling of the State Board concerning regular physicians giving anesthetics brought to the attention of the Committee.

#### *Advisory Health Council*

The attention of the Executive Committee was called to the fact that the General Federation of Women's Clubs, the League of Women Voters, and the University Women had mentioned to various members of the Committee that these organizations desire a representative upon the Advisory Health Council. The executive secretary was instructed to pass this word on to Dr. Gatch, chairman of the Advisory Health Council.

#### *The Journal*

JOURNAL exhibit at convention. THE JOURNAL will have a display in the scientific exhibit. Approved by the Committee.

The Executive Committee approved the purchase for THE JOURNAL office of the latest copy of "Nostriums and Quackery" published by the American Medical Association.

#### BUREAU OF PUBLICITY

July 13, 1934.

Meeting called to order at 3:30 p. m.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D., J. H. Stygall, M. D., and T. A. Hendricks, executive secretary.

Minutes of the meetings of June 1 and June 26 approved for signature.

Release for publication in Saturday papers, July 21, "When to Remove Tonsils," approved by the Bureau with the suggestion that it be brought to the attention of an otolaryngologist for final review and suggestions.

#### *Radio releases:*

Saturday, June 30—"A Safe and Sane Summer."

Saturday, July 7—"Chiggers."

#### *Report on medical meeting:*

June 7—Fountain-Warren County Medical Society, Covington, Ind. "Early Attention to Recent Skull Fractures and Incident Injury to Brain."

The historian appeared before the Bureau and presented various types of frames for the pictures of past presidents along with an estimate as to the cost of these frames. The historian was instructed to write a letter to the Bureau giving a summary of these costs, and the Bureau unofficially approved the expenditure based upon the verbal report of the historian. A formal report is to be made by the historian to be followed by the formal approval of the Bureau.

A request has been made by the director of the Bureau of Health Education of the State Division of Public Health for any information the Bureau of Publicity may be able to give him in regard to the approximate number of health talks that were given by members of the county medical societies during the past year. The Bureau instructed the secretary to prepare a questionnaire to be sent to the county societies asking for this information.

Suggestion was made that articles in regard to cancer and cancer prevention be released by the Bureau of Publicity. Suggestion made that an article upon "Cancer of the Rectum" be prepared by the Bureau.

A number of newspaper clippings were reviewed by the Bureau.

August 10, 1934.

Meeting called to order at 3:30 p. m.

Present: William N. Wishard, M. D., chairman; E. D. Clark, M. D.; J. H. Stygall, M. D., and T. A. Hendricks, executive secretary.

Release for publication in August 18 papers, "The Cancer Problem," approved by the Bureau after making certain corrections.

#### *Radio releases:*

Saturday, July 14—"The Common Drinking Cup."

Saturday, July 21—"When to Remove Tonsils."

Saturday, July 28—"Causes of Illness."

Saturday, Aug. 4—"Poison Ivy."

The secretary to the historian of the Association attended the meeting of the Bureau and final arrangements for letter-



ing and framing the pictures of past presidents were completed.

Request for speaker:  
November—Woman's Auxiliary to the Vigo County Medical Society, Terre Haute, Indiana. Bureau of Publicity instructed the secretary to ascertain the definite date of this meeting.

The following letter in regard to health talks to the laity was prepared and sent to the county society secretaries:

"In order to keep a more accurate record of activities under the new Indiana plan for health education, it is necessary that we know the number of health talks made by the doctors of each county society during the year. Therefore, if possible, we would like to know the approximate number of health talks given by the doctors of your society during the past state fiscal year (July 1, 1933-June 30, 1934.)

"In the future a report blank will be mailed to you the first of each month from the Bureau of Health Education of the Division of Public Health of Indiana, asking you to send in the number of talks made for the preceding month. All reports should be mailed to the Bureau of Health Education, Division of Public Health, State House Annex, Indianapolis.

"The Bureau of Publicity will appreciate any help or cooperation you will be able to give the state health officials along this line.

"The Bureau also will appreciate it if you can return the enclosed card for the past year as soon as convenient."

September 7, 1934.

Meeting called to order at 3:30 p.m.  
Present: William N. Wishard, M.D., chairman; E. D. Clark, M.D., J. H. Stygall, M.D., and T. A. Hendricks, executive secretary.

Release for publication in Monday papers, September 17, "So-Called Cancer Cures," approved by the Bureau.

Radio releases:  
Saturday, August 11—"Running Water Is not Always Pure."  
Saturday, August 18—"The Cancer Problem."  
Saturday, August 25—"Lye as a Poison."  
Saturday, Sept. 1—"Preparation of Children for School."

Radio broadcast October 8: Request of the Indianapolis Convention and Publicity Bureau that someone be assigned to make a ten-minute broadcast to the public concerning the Indiana State Medical Association meeting and give over the radio any message that the Bureau of Publicity may have for the public brought to the attention of the Bureau. The Bureau felt that the President of the State Association was the logical one to make this talk.

Request for speakers:  
September 13—Lake County Medical Society, Gary, Indiana. Three speakers assigned by the Bureau.  
November—Woman's Auxiliary to the Vigo County Medical Society, Terre Haute. No further correspondence concerning the speaker for this meeting.  
November 7—Thirteenth District Medical Society. Matter discussed by Bureau and speakers suggested.

In regard to the pictures of past presidents, correspondence from the office of the historian brought to the attention of the Bureau. Report made of the completion of framing and lettering of the pictures already at hand. The Bureau instructed the secretary to write to the historian and his secretary, thanking them for their valuable contribution in obtaining this material.

A great deal of literature in regard to cancer cures, among them being an elaborate presentation entitled "Cancer and Its Allied Diseases," by a Detroit physician, claiming relief of cancer by a method of injection, brought to the attention of the Bureau. The Bureau felt that the public should be warned in regard to the claims set forth in this material and

hence it prepared the above mentioned release upon "So-Called Cancer Cures" for publication.

Article in one of the popular magazines entitled "Mothers Can Be Saved" reviewed by the Bureau. The Bureau felt that a number of the statements made in this article could be questioned from the scientific standpoint.

A letter sent to the county medical societies requesting that each secretary make a report on health talks to the laity placed before the Bureau of Publicity. The Bureau instructed the secretary to include the reports received on these talks in the annual report of the Bureau and instructed the secretary to invite the director of the State Division of Public Health and the head of the Division of Education of the State Division of Public Health to attend the next meeting of the Bureau.

September 14, 1934.

Meeting called to order at 3:30 p.m.  
Present: William N. Wishard, M. D., chairman; E. D. Clark, M.D.; J. H. Stygall, M.D., and T. A. Hendricks, executive secretary.

Release for publication in Saturday papers, September 22, "Sleeping Sickness," approved by the Bureau.

Radio release, Saturday, September 8—"How Can You Know?"

Three members of the State Division of Public Health were present at the meeting of the Bureau and plans were perfected for distributing and receiving report blanks on speeches made by physicians before the laity.

INDIANA DIVISION OF PUBLIC HEALTH  
BUREAU OF COMMUNICABLE DISEASES

Monthly Report, August, 1934  
Thurman B. Rice, M. D.

Diseases	Aug.	July	June	Aug.	Aug.
	1934	1934	1934	1933	1932
Tuberculosis .....	120	168	197	93	241
Chickenpox .....	5	18	80	5	12
Measles .....	33	212	2,803	30	24
Scarlet fever .....	69	103	233	82	94
Smallpox .....	5	0	6	2	7
Typhoid fever .....	112	55	34	93	109
Whooping cough .....	130	225	265	102	158
Diphtheria .....	41	33	40	41	107
Influenza .....	51	21	30	108	52
Pneumonia .....	3	10	18	5	7
Mumps .....	3	5	13	3	32
Poliomyelitis .....	6	2	1	4	0
Meningitis .....	3	0	3	10	20
Encephalitis .....	2	0	0	1	0

Monthly Report, September, 1934

DISEASES	Sept.	Aug.	July	Sept.	Sept.
	1934	1934	1934	1933	1932
Tuberculosis .....	108	120	168	125	187
Chickenpox .....	19	5	18	50	28
Measles .....	71	33	212	7	26
Scarlet Fever .....	234	69	103	291	166
Smallpox .....	3	5	0	1	2
Typhoid Fever .....	98	112	55	76	90
Whooping Cough ..	134	130	225	84	81
Diphtheria .....	119	41	33	129	177
Influenza .....	69	51	21	139	56
Pneumonia .....	12	3	10	10	9
Mumps .....	3	3	5	7	28
Poliomyelitis .....	28	6	2	10	1
Meningitis .....	4	3	0	7	7
Encephalitis .....	77	2	0	0	0
Trachoma .....	3	0	0	0	0

## BOOK REVIEWS

### BOOKS RECEIVED

**SPINAL ANESTHESIA.** *Technic and Clinical Application.* By George Rudolph Vehrs, M.D., 269 pages with 81 illustrations. Cloth. Price \$5.50. C. V. Mosby Company, St. Louis, 1934.

\* \* \*

**PHYSIOLOGY IN HEALTH AND DISEASE.** By Carl J. Wiggers, M.D., professor of physiology in the School of Medicine of Western Reserve University, Cleveland, Ohio. 1156 pages. Cloth. Price \$9.00. Lea and Febiger, Philadelphia, 1934.

\* \* \*

**PRACTICAL OBSTETRICS FOR STUDENTS AND PRACTITIONERS.** By P. Brooke Bland, M.D., professor of obstetrics, Jefferson Medical College; chief obstetrician, Jefferson Medical College Hospital, Philadelphia; and Thaddeus L. Montgomery, M.D., associate in obstetrics, Jefferson Medical College, Philadelphia. Second edition. 730 pages, illustrated with 516 engravings, including 21 colored plates. Cloth. Price \$8.00. F. A. Davis Company, Philadelphia, 1934.

\* \* \*

**TUBERCULOSIS IN THE CHILD AND THE ADULT.** A discussion of Pathologic Anatomy, Pathologic Physiology, Immunology, Diagnosis and Treatment. By Francis Marion Pottenger, A.M., M.D., LL.D., F.A.C.P., clinical professor of medicine (Department of Chest) University of Southern California, School of Medicine; medical director, Pottenger Sanatorium, Monrovia, California. 611 pages, illustrated. Cloth. Price \$8.50. C. V. Mosby Company, St. Louis, 1934.

\* \* \*

**INSTITUTIONAL CARE OF MENTAL PATIENTS IN THE UNITED STATES.** By John Maurice Grimes, M.D., former staff member of the Council on Medical Education and Hospitals of the American Medical Association. 138 pages. Cloth. Price \$3.00. Published and distributed by the author, 1816 North Clark Street, Chicago, 1934.

\* \* \*

**APPLIED ANATOMY.** *The Construction of the Human Body, Considered in Relation to its Functions, Diseases and Injuries.* By Gwilym G. Davis, M.D., late professor of orthopedic surgery and associate professor of applied anatomy in the University of Pennsylvania. Ninth edition, reset, re-illustrated and completely revised by George P. Muller, M.D., professor of clinical surgery, graduate school of medicine, University of Pennsylvania; assisted by B. J. Alpers, M.D., Robert A. Kimbrough, Jr., M.D., Stirling W. Moorhead, M.D., I. S. Ravdin, M.D., and S. Dana Weeder, M.D. 717 pages, with 674 illustrations, mostly from original dissections and many in color. Cloth. Price \$9.00. J. B. Lippincott Company, Philadelphia, London, Montreal, 1934.

\* \* \*

**CATARACT. ITS ETIOLOGY AND TREATMENT.** By Clyde A. Clapp, M.D., F.A.C.S., associate professor of ophthalmology, John Hopkins University; professor of ophthalmology, University of Maryland. 254 pages with 92 engravings. Cloth. Price \$4.00. Lea and Febiger, Philadelphia, 1934.

\* \* \*

**NATURE'S WAY.** *The Fertile and Sterile Periods of Marriage.* By Victor C. Pedersen, A.M., M.D., F.A.C.S. 81 pages. Cloth. Price \$1.00. G. P. Putnam's Sons, New York.

\* \* \*

**AN ACTIVITY ANALYSIS OF NURSING.** By Ethel Johns, R.N., editor, *The Canadian Nurse*, and Blanche Pfefferkorn, A.M., R.N., director of studies, National League of Nursing Education. Prepared under the auspices of the Committee on the Grading of Nursing Schools. 214 pages.

Cloth. Price \$2.00. The Nursing Information Bureau of the A. N. A., New York City, 1934.

\* \* \*

**NURSING SCHOOLS TODAY AND TOMORROW.** Final Report of The Committee on the Grading of Nursing Schools. 263 pages. Cloth. Price \$2.00. Published by the Nursing Information Bureau of the A. N. A., New York City, 1934.

\* \* \*

**A MANUAL OF THE PRACTICE OF MEDICINE.** By A. A. Stevens, A.M., M.D., formerly professor of applied therapeutics in the University of Pennsylvania; honorary consulting physician to the Philadelphia General Hospital; consulting physician to St. Agnes Hospital, Philadelphia. Thirteenth edition, revised. 685 pages. Cloth. Price \$3.50. W. B. Saunders Company, Philadelphia and London, 1934.

### BOOKS REVIEWED

**TEXTBOOK ON GYNECOLOGY.** By Arthur Hale Curtis, M.D., professor and head of the department of obstetrics and gynecology, Northwestern University Medical School. Second edition, reset. 493 pages with 300 original illustrations, chiefly by Tom Jones. Cloth. Price \$6.00. W. B. Saunders Company, Philadelphia and London, 1934.

To the practitioner, a book telling the individual practices and ideas of a leader of medicine or surgery whom he looks up to and admires is the most valuable type of textbook. Such a book is Dr. Curtis' "Textbook of Gynecology."

The first edition was an excellent small text but this edition has been much enlarged and in general has been remade. Many new illustrations by Tom Jones have been added showing very comprehensively the steps for the common operations of gynecology. The book is of 493 pages and inviting to be read.

The first chapter, "The Gynecological Patient Presents Herself," can be read with profit by everyone treating disorders of women.

In the treatment of all pelvic infections Dr. Curtis recommends conservatism, especially in gonorrheal disease. Active and surgical treatment should be chiefly for the unsatisfactory end results and pointing abscesses.

The chapters dealing with prolapses are especially carefully prepared. In vaginal operation he recommends the use of pituitrin as a hemostatic. He stresses the advice that for all pelvic work tissues should not be left rigid for it is unnatural to the normal state and is a source of post-operative discomfort. In the post-operative care he points out the bladder as of first consideration.

In the treatment of lesions of the cervix he does not recommend radium as formerly. He especially calls attention to the formation of cervical canal strictures following infections and treatment with radium and the cautery. He also warns of the causing of pelvic cellulitis by treating an infected cervix by radium or cautery.

The correction of retroversion is advised to prevent pelvic congestion and the possibility of endometriosis.

Other chapters cover in their discussion all other important phases of gynecology. One chapter treats of the early months of pregnancy from a gynecological aspect. His recommendations for the treatment of abortions, clean and infected, are ultraconservative compared to most practice. There is a chapter on radiotherapy. Pre-operative and post-operative care are carefully discussed.

For a small, comprehensive, well-written textbook of gynecology, nothing better can be found.

\* \* \*

**POSTURES AND PRACTICES DURING LABOR AMONG PRIMITIVE PEOPLES.** Adaptations to Modern Obstetrics, with chapters on Taboos and Superstitions and Post-partum Gymnastics. By Julius Jarcho, M.D., New York. 175 pages, with 130 illustrations. Cloth. Price \$3.50. Paul B. Hoeber, Inc., New York, 1934.

The first part of this book might also have been named "Believe it or not." It relates a compilation of many cus-



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### ORIGINAL ARTICLES

#### THE PROBLEMS OF ACUTE APPENDICITIS\*

I. S. RAVDIN, M. D.

PHILADELPHIA



I. S. RAVDIN

Nearly half a century has passed since Reginald Fitz<sup>1</sup> solved the mystery of suppuration in the right lower quadrant of the abdomen. With the mastery which only a genius can have, he showed conclusively that typhlitis was a rare lesion while appendicitis was a common one. Koch's<sup>2</sup> discovery of the tubercle bacillus was still fresh in the minds of everyone. The Klebs-Loeffler<sup>3</sup> bacillus had only recently been discovered. The tetanus bacillus and the plasmodium malariae had not been described nor the cause of yellow fever even dreamed of. Operations for the removal of brain tumors, and for hyperthyroidism had not been attempted. Cholecystectomy was still a rarely performed operation. In fact, the era of aseptic surgery was just beginning, even antiseptic surgery was not as yet accepted by many well-known surgeons of the time.

As we look in retrospect the outlook of pulmonary tuberculosis is decidedly more hopeful, the death rate per 100,000 having dropped in the original registration states from 173.2 in 1900 to 52.0 in 1932. Diphtheria which had a death rate of 40.4 per 100,000 in the same states in 1900 now has a death rate of 2.5.<sup>5</sup> Tetanus can be prevented and frequently cured. Endemic malaria has nearly disappeared from this country. Brain tumors are now removed with an amazingly low

mortality. Thyroidectomy for hyperthyroidism is an effective procedure and the mortality is so low that we have in our thyroid clinic in the past three years had a mortality of only 0.55 per cent. We regard cholecystectomy as a relatively simple operation; in fact in our last 150 cholecystectomies there has not been a single death.

However, during this period of a nearly magic realignment in medicine and surgery the problems of appendicitis remain at least in part unsolved, and to a large extent unconquered.

It is important to distinguish between that condition called chronic appendicitis and acute inflammatory lesions of the appendix or obstruction of the lumen of the appendix resulting from a fecalith. The ease with which patients with a wide variety of right lower quadrant pains can be induced to be operated on for so-called chronic appendicitis is mute evidence of the fear of the laity of the acute process. And yet it is a well known fact to nearly every practitioner of medicine and to every surgeon who follows his patients that the end results after operations in the absence of an acute lesion are notoriously bad, so bad in fact that in the absence of a history of recurrent attacks of acute pain many of us believe that operation is but rarely indicated. Failure on the part of either the physician or the surgeon to find the explanation of right-sided pain is little reason indeed for removing the appendix in the hope that even though it may do no good it can do little harm. There are many other causes for right lower quadrant distress and the time has come when we must speak more frankly about a condition the frequency of which has been grossly exaggerated.

These observations, however, can in no way be applied to acute appendicitis. In 1914 John B. Murphy<sup>6</sup> stated that "When we come right down

<sup>1</sup> Fitz, R., *Tr. Assoc. Amer. Physiol.*, 1886, 1:107.

<sup>2</sup> Koch, R., *Berlin Klin. Wochens.*, 1882, 19:221.

<sup>3</sup> Klebs, E., *Verhandlungen des Congresses fur Innere Medicin*, 1883, 2:139.

<sup>4</sup> Loeffler, F., *Mittheilungen aus dem Kaiserlichen Gesundheitsamte*, 1884, 2:421.

<sup>5</sup> Dublin, I., Statistics Supplied to the Author.

<sup>6</sup> Murphy, J. B., *Clinics of J. B. Murphy*, 1914, 6:1097.

\* Presented before the General Meeting of the Indiana State Medical Association, Indianapolis, October 10, 1934.

to a heart to heart talk about appendicitis, the grim fact which we must admit is that we are still losing too many cases."

A year later Haggard<sup>7</sup> agreed with Murphy when he stated that "hospital reports for the past year show that the average mortality in appendicitis in all stages of the disease in those reported hospitals is about 20 per cent." A decade later Murat Willis<sup>8</sup>, from a study of vital statistics, called our attention to the increase in the mortality after operations for appendicitis since the great war. John Bower<sup>9</sup> has published several reports on the mortality from acute appendicitis in 28 hospitals of Philadelphia, 5.97 per cent in 1928-1929 and 4.81 per cent in 1930; 4.39 per cent in 1931; 3.44 per cent in 1932; and 3.54 per cent in 1933 (Table I).

TABLE I  
MORTALITY FROM ACUTE APPENDICITIS  
Philadelphia (Bowers)

Year	Number Cases	Number Deaths	Mortality Per Cent	Average Time—Onset Symptoms and Operation	
				Recoveries Hours	Deaths Hours
1928-29	5,121	306	5.97	56.5	95.06
1930	3,095	149	4.01	48.67	68.05
1931	3,142	138	4.39	52.55	78.38
1932	3,546	122	3.44	48.62	72.95
1933	3,783	134	3.54	54.46	74.56
Total	18,687	849	4.54	54.44	81.43

The literature might be reviewed indefinitely but one might summarize it by stating that the mortality in appendicitis has been increasing when the data are obtained from vital statistics, and has been decreasing in reports based upon operative series. The decrease, however, by any method of computation is with the exception of a few isolated instances not striking. The data of Hoffman<sup>10</sup> show that during 1933 there was an increase of 0.49 per 100,000 deaths over 1932.

The death rate per 100,000 in Indianapolis in 1930 was 15.3; in 1931, 13.2; in 1932, 10.9 and in 1933, 18.2. In 30 cities of over 300,000 population in this country Indianapolis stood 19th from the standpoint of the death rate from appendicitis, while your neighbor to the south, Louisville, stood 26th (Table II).

It would seem that after the work of Fitz, Senn, Murphy, Ochsner, Deaver and a host of brilliant surgeons interested in this very important subject that the mortality after operations for acute appendicitis, the most common surgical lesion in the abdomen, should be approaching the vanishing point and yet we must admit, not without some shame, that we are still far from this objective.

Only a few weeks ago I received a letter from a prominent attorney in a town of 10,000. He

<sup>7</sup> Haggard, W. D., *Southern M. J.*, 1915, 8:957.  
<sup>8</sup> Willis, A. M., *Surg. Gynec. and Obst.*, 1926, 42:318.  
<sup>9</sup> Bower, J. O., *Bull. Dept. Public Health*, Aug.-Sept., 1934.

TABLE II  
DEATH RATE FROM APPENDICITIS IN 30 CITIES OF  
OVER 300,000 POPULATION (Hoffman)

City	Population	Deaths	DEATH RATE PER 100,000			
			1933	1932	1931	1930
Houston, Texas	340,829	21	6.2	16.0	7.4	.....
Portland, Ore.	315,204	32	10.2	17.7	15.3	14.5
Seattle, Wash.	381,378	45	11.8	12.7	17.2	14.7
Philadelphia, Pa.	1,990,975	244	12.3	11.3	13.9	14.4
Oakland, Calif.	305,396	40	13.1	.....	.....	.....
Milwaukee, Wis.	616,352	83	13.5	12.9	17.0	20.5
San Francisco, Calif.	674,564	92	13.6	12.5	15.5	15.1
Los Angeles, Calif.	1,446,074	201	14.0	12.2	14.6	15.3
Cleveland, Ohio	932,994	136	14.6	14.0	18.1	17.2
Detroit, Mich.	1,749,505	256	14.6	14.2	17.8	18.7
Atlanta, Ga.	323,757	48	14.8	18.2	.....	.....
Chicago, Ill.	3,588,637	547	15.2	14.5	17.7	18.2
Baltimore, Md.	827,221	126	15.2	15.2	14.5	18.2
New York, N. Y.	7,335,952	1,149	15.7	14.8	16.3	15.9
Pittsburgh, Pa.	693,252	109	15.7	17.5	16.5	16.4
Minneapolis, Minn.	490,720	81	16.5	22.0	21.7	23.2
Rochester, N. Y.	338,311	57	16.8	15.8	16.0	15.8
Jersey City, N. J.	322,565	56	17.4	17.8	16.0	15.8
Indianapolis, Ind.	379,878	69	18.2	10.9	13.2	15.3
Toledo, Ohio	305,694	57	18.6	19.9	.....	.....
St. Louis, Mo.	837,404	162	19.3	15.5	19.8	21.3
Newark, N. J.	451,073	88	19.5	21.2	20.6	22.6
Boston, Mass.	791,601	159	20.1	19.0	22.7	21.5
Buffalo, N. Y.	593,941	120	20.2	22.0	20.7	19.5
New Orleans, La.	481,265	98	20.4	20.9	25.0	23.0
Louisville, Ky.	330,677	69	20.9	21.0	17.7	18.8
Washington, D. C.	502,091	110	21.9	19.7	18.9	20.1
Kansas City, Mo.	423,458	96	22.7	25.0	28.6	26.4
Columbus, Ohio	307,412	70	22.8	24.2	.....	.....
Cincinnati, Ohio	466,877	117	25.1	27.1	28.2	24.1
Total	28,093,984	4,538	16.15	15.64	17.36	17.62

shocked me when he said "we have had a couple of very sad deaths this week from appendicitis. Appendicitis in this part of the country has the same mortality rate as old-fashioned smallpox."

What are the problems which we must face if this appalling situation is to be remedied? It can be said with some assurance that the mortality in acute appendicitis will bear a direct relation to any number of cases of peritonitis present in given series. The mortality of simple uncomplicated acute appendicitis is low in nearly every well conducted hospital. If it exceeds 2 to 3 per cent the surgical staff needs overhauling for in many hospitals the mortality is approximately the same as that of chronic appendicitis. In the city of Philadelphia during the year 1933, according to Bower<sup>9</sup> there were 455 cases of spreading peritonitis admitted to our hospitals with 112 deaths or a mortality of 24.61 per cent. With a 24 per cent mortality in cases of spreading peritonitis in a city whose death rate from appendicitis is 12.3 per

TABLE III  
ACUTE APPENDICITIS

	Number Cases	Number Deaths	Total Mortality Per Cent	Operative Mortality Per Cent
Acute Appendicitis	227	1	0.44	0.44
Acute Appendicitis with Peritonitis	131	0	0.00	0.00
Acute Appendicitis with Abscess	19	1	5.30	5.30
Acute Appendicitis with General Peritonitis	15*	3	20.00	14.3
Total	392	5	1.27	1.02

\*One patient died without operation.



100,000, or fourth in the list of 30 cities in which data was collected by Hoffman<sup>10</sup>, what must the mortality rate be in those cities where the death rate is 25 or more per 100,000?

Of the utmost importance in any program to reduce the surgical mortality of this lesion is a continued educational program which teaches the laity to consider every instance of acute abdominal pain as a potentially serious lesion unless proved otherwise. Neglect on the part of the patient and members of his family to consult a competent medical practitioner is too often the cause of a fatality. In Philadelphia during a three year period 92 boys and girls of high school age died of appendicitis; this in the face of an active educational campaign. The data from other cities which have not shown a planned civic interest in this subject must undoubtedly show a larger percentage of deaths in this important age group.

Purgation is still all too frequently practiced not only by the laity but by the practitioner as well. Much as we would like to place the sole blame for the continuance of this ill advised procedure on the lay group we must as surgeons admit that too many of the patients whom we have seen with spreading peritonitis of appendicular origin received their purgative on the advice of their physician. Purgation and delay in hospitalization are the major factors in the present high mortality of appendicitis. If this be true, and I believe it is, the high mortality associated with acute appendicitis in which the infection has spread beyond the confines of the appendix is a reflection more frequently on our lack of civic interest in publicizing the lay group and on the ability of the attending physician properly to diagnose the condition, than on the accomplishments of the surgeon.

The diagnosis of acute appendicitis is often not as simple a matter as our textbooks would lead us to believe. In fact one of the major defects of our system of medical education is that which insists on the presence of a complete symptom complex as characteristic of a given disease. As long as individuals differ in their quantitative reaction to disease, as long as the virulence of the infection may vary, and as long as the symptoms complex may be modified by the position of the appendix, just so long must we not expect a complete textbook picture before arriving at the correct diagnosis. Many more patients have been lost as the result of delayed operation than have been lost from an ill advised operation. An occasional patient may be operated on who has pneumonia, or pyelitis, or a ruptured Graffian follicle or even simple gastro-enteritis, but only rarely is the outcome in these patients unfavorable.

There is no medical treatment of acute appendicitis. An ice bag placed on the abdominal wall in no wise influences the degree or state of the inflammation since the cold penetrates only a small

portion of the abdominal wall. Acute appendicitis is, therefore, from its inception a surgical lesion and if for some reason an attempt is made to delay operation the responsibility should be shared with some one who is daily associated with the problems which the lesion presents.

Much as we surgeons might like to place the sole responsibility for the continued high death rate on the patient or upon the general practitioner we must admit that the rising mortality is in part associated with an increasing number of operations being done by inexperienced and poorly qualified surgeons. There can be no doubt but that the well trained surgeon is today better equipped than ever to meet the problems which acute appendicitis presents, but too often the patient is left in the hands of individuals with varying degrees of surgical experience. While the junior members of surgical staffs may be competent to operate on uncomplicated cases, patients suffering with local, diffuse or spreading peritonitis should be given the judgment and skill of the senior members of the staff.

That the mortality in acute appendicitis, with or without peritonitis or abscess, can be reduced if careful attention is given to the various details of preoperative preparation, the selection of the proper time for operation, the judicious use of anesthesia, the careful planning and conduct of the operation and exacting post-operative therapy can hardly be doubted. We have on my service in the Hospital of the University of Pennsylvania operated on a conservative series of 391 patients with acute diffuse appendicitis, gangrene, abscess or acute appendicitis with local or generalized peritonitis with a mortality of 1.02 per cent. My surgical fellows have carried their full burden of this work so that the results reflect the work of at least 7 operators. That considerable credit belongs to the interne staff is without question, since every member of the team looks upon a death from appendicitis as a personal defeat. The data of our cases are given in Table III.

#### *The Time of Operation*

I do not believe it is possible to place a time limit for the immediate or the delayed operation. As long as the infection gives evidence of being limited to the confines of the appendix, except in the presence of abscess we operate as an emergency. However, by emergency I do not mean the transference of patients from receiving ward to the operating room. Even in the early cases a short period of two or even three hours of hospitalization so that the patient may become more quiet under the influence of an opiate is usually indicated. An abscess is never considered a surgical emergency. Operation is done when the patient has been carefully prepared.

In widespread or generalized peritonitis we firmly believe that the delayed operation offers the best chance of recovery. Time and again we have

<sup>10</sup> Hoffman, Statistics Prudential Life Insurance Company.

observed a critically ill patient localize his infection under a regime of rest, duodenal intubation, morphine and a continuous intravenous drip of normal saline and 5 or 10 per cent glucose. In these patients, in whom too early operation is too often followed by rapid exodus, the surgeon is more likely to operate too early than too late. In this connection I wish to state that I have never seen one of these desperately ill patients recover following the simple insertion of drainage.

Only in infants and young children do we digress from this regime for in them we operate regardless of the stage of the disease. Children do not as a rule wall off their infection as readily or as well, and in them it is more difficult to maintain a proper fluid and salt balance and to prevent changes in blood reaction.

#### *Preoperative Treatment*

All patients who give a history of vomiting just prior to admission or who vomit after admission have a Jutte tube passed into the stomach or duodenum for suction drainage. In the patients who are to be treated by the delayed method this procedure is of the greatest importance.

Dehydrated patients are given from 500 to 1,500 c.c. of normal saline solution with 5 or 10 per cent glucose over a period of from 1 to 2 hours. If operation is not then done the fluid is continued as a slow intravenous drip.

Morphine is given every patient, the amount depending upon the age of the patient and the period

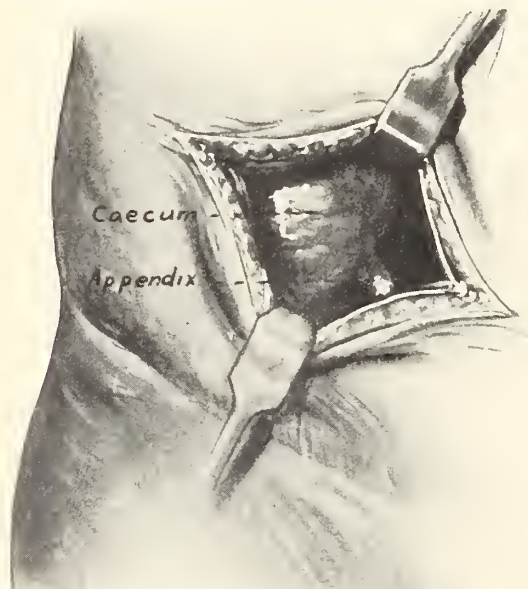
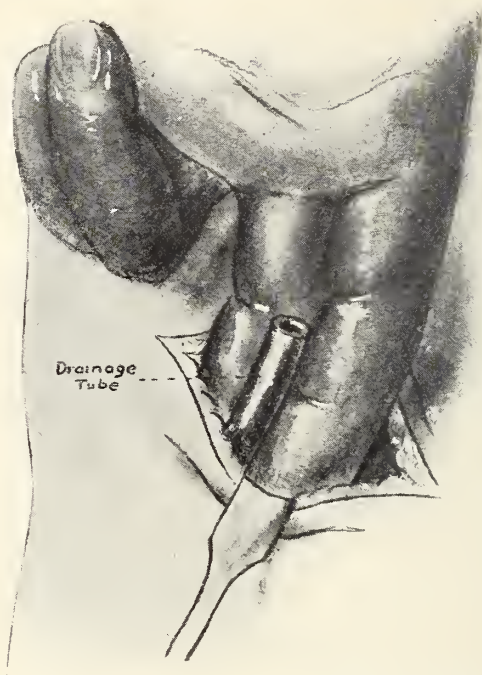


Figure 1.

John F. Trainor, '34



John F. Trainor, '34

Figure 2.

of time elapsing before operation. It should be given at regular intervals every third or fourth hour unless the respiratory rate is reduced to 14 to 16 per minute.

#### *Anesthesia*

We are convinced that the mortality rate in acute appendicitis with peritonitis can be reduced if spinal anesthesia is used. In simple acute appendicitis, as a rule, the choice of the anesthetic plays little part in the subsequent course of events. In the obese, in gangrene, abscess or diffuse peritonitis the relaxation afforded by spinal anesthesia and the quiet abdominal cavity permit of operation with a degree of celerity which even the most skilled surgeon cannot obtain with any other anesthetic. Properly administered, the blood pressure rarely falls more than 10 or 20 millimeters of mercury, and even should it fall more for 5 or 10 minutes there is not an iota of evidence that this lowers the resistance of the patient to infection while there is ample evidence that infection is frequently spread by the extensive packing off which is often necessary under incomplete relaxation.

#### *The Incision*

We have for some years been convinced that the McBurney incision is the ideal incision when operating for all types of acute appendicitis where the appendix is expected to be found in the right lower quadrant of the abdomen (Fig. 1). It pro-



vides direct access to the site of operation, thus preventing to a large degree the spreading of the infection which must invariably occur when the rectus incision is used. Gauze packs are rarely necessary and closure is easily obtained. The incision can be easily extended in any direction and should there prove to be an error in the diagnosis the sin is more than pardonable. When drainage is required it is placed along the parietal peritoneum and not over coils of small intestine (Fig. 2). The patient as a rule can be gotten out of bed at a much earlier date and herniation is less apt to occur in drained patients.

On a number of occasions our surgical fellows have come to us from schools where the rectus incision is used in operations for acute appendicitis and it has rarely taken them long to see that the convalescence of their patients did not compare to those operated on through the muscle splitting incision. Suffice it to say that the lowest mortality figures are found in those clinics where it is used as a routine procedure.

#### *The Operation*

We believe that the use of gauze packs within the peritoneal cavity are only rarely indicated. At most a small gauze tape should suffice. In abscess it is justifiable more adequately to surround the area before instituting drainage. The universal use of suction where fluid is encountered is of the greatest help. It permits of visualization of an area that may otherwise be obscured by turbid fluid or pus and it provides for the removal of considerable material that otherwise would be absorbed by the peritoneal lymphatics. Its use is a distinct addition to surgical therapeutics.

If small intestine other than the few terminal inches of the ileum are encountered in the wound during the operation we consider the operation technically imperfect. With good relaxation only a minor amount of retraction is necessary except in obese individuals.

After the base of the appendix is located we believe that less damage is done, if freeing is necessary, by use of the index finger. This can be done without the extensive packing off and retraction which are required if the entire length of the appendix is to be visualized. The trauma incident to careful finger exploration and dissection in a fresh exudate is of minor degree when compared to the traumatizing effects of gauze packs and prolonged retraction. In attempting to find the correct plan of cleavage in the presence of abscess the exploring finger will give more information than any instrument.

When an abscess is encountered we as a rule also remove the appendix. If, however, this does not appear to be feasible at the time we advise its removal within from 3 to 5 weeks after wound healing. It is often remarkable how few adhesions are then encountered.

We have never been convinced that closure of the peritoneum without drainage in purulent cases is based upon sound surgical principles. In every instance where free pus is found drainage is instituted. In these purulent cases a strip of iodoform gauze is placed along the bed in which the appendix lay. A rubber dam cigarette drain may be placed beside this. These drains if properly placed provide an open area for drainage. In the presence of considerable pus a soft rubber tube is used. All of the drainage material is as a rule surrounded by a coffer of rubber dam and the drainage is brought out along the lateral parietal peritoneum. Thus secondary obstruction is minimized.

In a number of the very worst cases we have placed a rubber catheter into the cecum through the appendiceal stump. If this is done distention of the colon is not encountered and fluids can be given into that portion of the colon from which they are most rapidly absorbed. This procedure first suggested to me some years ago by Wilson of Wichita, Kansas, has much to commend it. It has been used extensively by Jones<sup>11</sup> of Pennsylvania.

The wound is closed as a rule in layers by interrupted sutures, care being taken not to introduce so many sutures that the blood supply of the tissues is seriously interfered with. This prevents to a large degree the extensive sloughing of the external oblique fascia. When extensive drainage has been necessary only a few retaining sutures are employed.

#### *The Postoperative Care*

All patients in whom suppuration had occurred are immediately placed on a slow continuous intravenous drip of normal saline and 5 or 10 per cent glucose and suction drainage after the method described by Wangenstein is continuously employed.

These two procedures have in my opinion saved more lives than all the improvements in surgical technic. The fluid and salt requirements of the patient can be met by the introduction in the adult of from 2,500 to 5,000 c.c. per day. The exact amount of fluid required cannot be stated since each patient presents an individual problem. The sensible fluid output must be carefully measured and the insensible fluid lost must be gauged and added to the output which can be measured. The glucose administered by this method, while not great, spares the patient's tissues to an amazing degree.

Since the introduction of suction drainage it is only in the rarest of instances that enterostomy is necessary for adhesive obstruction.

In a selected group of patients, especially those of the obese type, we have found that the routine administration of pitressin is of great aid. When given every four hours for the first few days after operation, massive distention is not encountered. Suction drainage and pitressin thus act synergis-

<sup>11</sup> Jones, E. S., *Ann. of Surg.*, 1934, 99:640.

tically. We are not afraid that the stimulation of peristalsis will cause a spread of the abdominal infection. If the observations of numerous observers are correct, morphine also causes an increase in intestinal tonus.

This method of treatment is maintained until the patient has turned the corner, that is the temperature and pulse have descended from the maximum which they may have reached after operation and begun to approach the normal and at the same time the abdominal signs and symptoms show definite indications of improvement.

When the progress of the patient is not satisfactory we believe that one should look carefully to the abdomen for the explanation. Early x-ray for a sub-diaphragmatic collection and early institution of drainage has saved more than one patient's life while failure to realize its presence has been the cause of many a fatality.

In residual pelvic collections we are much more temperate. Drainage is as a rule not instituted until the abscess can be palpated above Poupart's ligament. The simple daily septic rise of temperature is not of itself cause for early exploration. The same surgical principles appertain here as in a primary appendiceal abscess. Other things being equal an extraperitoneal evacuation after the abscess is palpable offers the best chance of cure.

In any instance where drainage has been instituted the drains are not touched for at least four days. If after this period the patient is doing well, the iodoform strip and the cigarette drain are removed and the tube is then shortened one or two inches a day. The last thing removed is the coffer dam.

Of the greatest importance is eternal vigilance on the part of the resident and nursing staff. It is often a relatively simple matter early to control an impending catastrophe and often impossible to control it by any means once the process has become advanced. It is for this reason that I do not believe in the so-called standardized postoperative regimes. Each patient must be looked upon as presenting an individual problem and the surgeon and his staff be ever alert to the possibilities which the individual may present. If this be done it is often possible to save what initially appears to be a certain fatality. As long as the human factor must be considered we cannot ever expect to have all our patients with appendicitis sent to us in the early stages of the disease.

We as surgeons can, however, by careful attention to the factors which are known further to extend the now high morbidity and mortality pave the way for an improvement in the results now obtained. The final solution of this perplexing and ever vexing problem must depend upon earlier operation during the acute process. To obtain this objective we must depend upon more universal education of the laity and a closer cooperation between practitioner and surgeon.

## THE DIAGNOSIS AND TREATMENT OF UTERINE BLEEDING\*†

LUCIUS E. BURCH, M. D.

NASHVILLE, TENNESSEE

No medical organization in America has a grander tradition than that of the Hoosier state, and it is



LUCIUS E. BURCH

quite fitting that the entire profession should join in celebrating its 85th anniversary. Indiana was a pioneer in medical organization. As early as 1817 there was a well organized society in Vincennes. In 1849 the present Indiana State Medical Association was organized. The organization took place at Indianapolis, in Wesley Chapel, at the corner of Meridian Street and the Circle.

From then until now Indiana physicians have done much for the benefit of our people, both in peace and in war. Their services to our country have been unselfish, and history records their deeds. In time of peace the Indiana physicians have advanced medical organizations, public health, and medical education. The hospitals and institutions of the state stand as monuments to their progressive spirit. The first successful operation for gall stones was performed by Dr. John S. Bobbs in this city. Kemper has done a noble act in preserving these deeds for your future generations. It will give them a background that they can point to with pride.

There are many problems that confront our profession at the present time that are just as important as those that this state has overcome in the past. To my mind the most serious one is the attempt by lay forces to socialize medicine and place it in the hands of the states or Federal government, or under the control of insurance agencies. Our national organization and its journal have placed before the profession both sides of the question in a fair and impartial manner. It is fitting that organized medicine realizes the seriousness of this problem which threatens to tear us asunder and follow the leadership of our national organization in the battle that is to come.

It is with a feeling of both humility and appreciation that I accepted your invitation to appear on the program at this auspicious occasion. I have endeavored to select a subject which will be of interest to the general practitioner, and have tried to present it in a simple clinical way. The solution of the problem depends largely on the intelligent use of the five senses which our Creator has given us. Of course, the laboratory and x-ray are indispensable, but they will never rank in impor-

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† Presented before the General Meeting of the Indiana State Medical Association in Indianapolis, October 11, 1934.



tance with a careful history and complete physical examination. Mistakes in diagnosis will always occur, but the most glaring ones are the results of haste and the attempt to make a diagnosis by relying upon laboratory short-cuts rather than on sound clinical methods.

The bleeding uterus is a common ailment. In many cases it is difficult to arrive at an accurate diagnosis, but I feel sure that the average doctor can make a correct diagnosis in fully eighty per cent of these cases by using his clinical training, and that he can treat many of these as well as the specialist, provided his diagnosis is correct. Before going into the subject of uterine bleeding it is necessary to briefly review the physiology of the uterus and ovaries. Many important advances have been made in the endocrine relations of the female sexual apparatus and an understanding of these is essential to any consideration of uterine bleeding.

The healthy woman menstruates every 26 to 30 days with a duration of two to seven days. There are in this rule many exceptions and for this reason great stress is placed on a most careful history from the beginning of menarche up to the time of the first consultation. The normal woman ovulates (lays an egg) midway between the periods. This egg or ovum only lives for two days and for this reason the modern view that conception can only occur during two to three days in the month is correct. Certain changes occur in the uterus for the reception of this egg or ovum. Nature each month builds a nest to receive the fertilized ovum and carry it on to full maturation. Should conception fail to occur the nest breaks down and menstruation takes place. The ovaries control this cycle through their internal secretions. At present there are two known hormones derived from the ovary. One is spoken of as the female sex hormone or estrin and is derived for the most part from the ovarian follicles. This hormone is secreted throughout the intermenstrual period. The second hormone is only found after ovulation. A yellowish body is formed at the site of the ruptured follicle that produced the ovum spoken of as the corpus luteum and it is from this that the second hormone is derived which is spoken of as progesterin. The corpus luteum also produces a small amount of estrin. Estrin controls the changes in the uterus up to the time of ovulation and then the premenstrual changes are brought about by the action of both estrin and progesterin. If pregnancy is not present and ovulation fails to take place the endometrium is stimulated by estrin alone and a hyperplasia of the endometrium occurs, which is one of the most common causes of uterine bleeding. These cyclical changes in the uterus can be studied by making biopsies and examining the tissue. It is a most useful procedure in making a diagnosis of obscure uterine bleeding. While the ovaries control the changes in the uterus they are stimulated by a hormone or hormones

from the anterior pituitary spoken of as Prolan. These two glands have a reciprocal effect. The anterior pituitary stimulates the ovaries, and estrin, one of the ovarian secretions, depresses the anterior pituitary. This reciprocal action is believed to exist between the ovaries, thyroid and other glands of internal secretion.

Uterine bleeding in 85% of cases is due to one of five etiological factors—cancer, abortion, fibroid tumor, extra uterine pregnancy, and endocrine conditions. I have impressed upon my students these five common causes of bleeding by making them remember the word “cafee”—each letter in the word standing for one of the five etiological factors. By remembering this word and what each letter stands for one can, by getting the age of the patient and a careful history, have a fairly good idea of what he will find on pelvic examination.

The age is a most important factor in the life of a woman. It is impossible to lay down a rule of thumb that will apply to all cases. If, however, one knows the general rule the exceptional case is not so likely to pass unnoticed. Up to the time of menarche development of the genitalia is taking place and for this reason a gynecological disease is exceptional. Ovarian tumors are rare, the solid ones are usually sarcomatous and the cystic ones are either dermoid or one of the very rare malignant cysts. The important time in a woman's life extends from menarche through menopause. During this time almost any gynecological condition may be found. The most common ones are the accidents and infections following labor and abortion and the ravages of gonorrhea. Neoplasms of the ovaries and uterus are found during this period as well as the various ulcerations of the vulva. Malignancy may be found from puberty to menopause, but is more common between the 30th to 45th year. Complications from maldevelopment and lack of development of the genital apparatus also occur. The tubercular infections of the genital organs also are found at this time. The period after menopause is not so important. Prolapse and relaxation of the vaginal outlet often demand treatment. Neoplasms may occur, but are not so frequent as in the premenopausal period. Cancer of the body of the uterus usually appears at this time, but it should be remembered that it may occur at a much earlier age. It is a safe working rule to look on all bleeding from the uterus after menopause as malignant until its exact nature is proved by the usual thorough routine that is demanded in all gynecological examinations.

Let us now consider separately each of the five common conditions producing uterine bleeding. Cancer is the most important problem that confronts our profession today. It is a curable disease provided the diagnosis is made sufficiently early. This is well proved by the thousands of cured cases that are reported annually by the American College of Surgeons. The diagnosis of

cervical and uterine cancer is exceedingly easy. I will make the assertion that any graduate of medicine is capable of making the diagnosis provided he or she will make a digital and a speculum examination and a biopsy if anything of a suspicious nature is found. All methods of taking a biopsy come within the realm of the general practitioner. Special training is not necessary in carrying out this simple procedure. Our greatest problem is to educate the laity to apply for diagnosis for all irregular and profuse uterine bleeding. Lee of the Memorial Hospital of New York suggests the establishment of cancer centers throughout the country. This would be an excellent move in that it would be of great educational value to the laity and profession and also the patients would receive proper care and treatment. The responsibility for improving the cancer situation lies on the shoulders of the general practitioner, both urban and rural. He is the one to educate his clientele to apply for treatment and he is the one to make the examination and diagnosis. The taking of a biopsy from a suspicious cervix is an exceedingly simple and easy procedure. It should be remembered that it is the superficial tissue that is important in obtaining material for study and for this reason deep incisions and sutures are contra-indicated. It is also important to obtain the tissue for study from the edge of the suspected area. Schiller advises a very simple technique for biopsy in cancer of cervix. A sufficient amount of superficial material is scraped off the suspected area with a spoon. If any difficulty is found in loosening up the tissue, artery or tissue forceps may be used as an aid to the spoon. I would suggest that an ice-teaspoon be used as it has a longer handle and sharper edges. In the Vanderbilt Hospital a special pair of nipping forceps are used; the ordinary Rongeur forceps is an excellent substitute for these special forceps. Tissue forceps with a knife or scissors can also be used, remembering not to go deep and also remove the tissue from the edge of the suspected area. Any of these methods can be used in the office or home without the aid of an anesthetic, either local or general. No sutures are necessary to close up the raw area or to stop the bleeding. Schiller's test for selecting the site of biopsy is interesting, but will not be of great use to the practitioner. Lugol's solution is applied to the cervix, the healthy tissue taking the dye and the cancerous area standing out undyed surrounded by the dark area. This sounds easy for diagnosis, but it has some disadvantages in that erosion and eversion of the cervix or non-malignant ulcerations of the cervix will not take the dye. It has caused many more biopsies to be made and to the specialist has proved an aid in the diagnosis of the very early cases. The study of the cervix with a colposcope or a special microscope should also be mentioned as among the newer procedures that have been added to the armamentarium of the specialist. Biopsy

for suspected cases of cancer of the body of the uterus is a little more of a complicated procedure than that of cancer of the cervix. It can also be made by any graduate of medicine. Curettage is the common method employed and as suggested by Howard Kelly it can be frequently carried out in the multipara as an office procedure. There are many cases, however, in which an anesthetic will be necessary and this means additional expense and hospitalization for the patient. To obviate this difficulty Dr. John C. Burch has suggested a method of suction biopsy. The instrument consists of a cannula the size of a uterine sound with an opening in the end. This is introduced in the uterus and suction is applied by means of an attached syringe. Several bits of tissues are obtained. It is an office procedure and causes but very little pain. The originator of this procedure has improved this instrument by bringing out an intrauterine forceps that makes office biopsy a simple procedure. This last instrument is for the specialist and is only mentioned for the purpose of calling to your attention a new method for making studies of the endometrium. The tissue obtained for biopsy is placed in a small amount of 10% formalin and sent to a competent pathologist for a careful and prolonged study. If the case is suspicious and a negative report is returned from the laboratory do not hesitate to repeat the biopsy.

The diagnosis of abortion is usually easy. The laity should be taught to save any material that is expelled for examination by the attending physician. If any doubt of pregnancy exists the Aschheim-Zondek or the Friedmann test of the urine should be made. It is a safe rule when attending any suspicious case of abortion to eliminate the possibility of extrauterine pregnancy. The treatment is most important and if improperly managed may bring about a fatal issue or a prolonged illness. The thousands of invalids annually that date their illness from an abortion is a striking proof of this statement. The patient should be kept in bed. Bromides and opium are given internally. Vaginal examinations should not be made on account of the danger of introducing infection. In the occasional case where vaginal examination is absolutely necessary every sterile precaution should be taken. Hemorrhage should be controlled by vaginal packing and if profuse and causing a marked drop in the blood pressure, operative interference is demanded. The operation should consist of dilatation of cervix if not already dilated and the removal of the products of conception with the finger or sponge forceps. The curette in the hands of any one is a dangerous instrument and should not be used. If one is not certain that all pieces of tissue have been removed, pack the uterus and when the gauze is removed it will bring away any small fragments that may have been left. Criminal abortions are septic and active interference is dangerous. Those cases of abortion that have become septic should have the



benefit of palliative treatment and if marked anemia is present blood transfusions are indicated. Operative intervention in these cases is contra-indicated until the temperature has been normal for at least two weeks. The internal administration of the ergot preparations and pituitrin are indicated in incomplete abortions with a flaccid uterus.

Fibroids as a rule are easily diagnosed. They are most commonly found between 30 and 45 years of age. A few of these tumors are found between 20 and 30 years of age and under 20 they are most unusual. The chief symptom of fibroid is bleeding and this occurs in a little over 50% of cases. It is not unusual, however, to see a large tumor without menstrual disorders. The symmetrical fibroid is the one that causes difficulty in diagnosis. It is a safe working rule to consider all symmetrical tumors of the abdomen as a pregnancy until proved otherwise by the usual tests. Fibroids do not necessarily mean surgery. A tumor of small or average size that does not present symptoms and is discovered during active sexual life should be left alone. Patients of this character should be examined twice yearly by the family physician. Those cases that demand operation during sexual life should have a myomectomy and if this is not possible and the cervix is not diseased a high supravaginal hysterectomy with the preservation of one or both ovaries is the operation of choice. Tumors not larger than a three months pregnancy and not associated with an inflammatory disease of the appendages, appearing near the age of menopause, should be treated by x-ray or radium. This form of treatment, however, is not applicable to submucous or subserous pedunculated fibroids.

X-ray or radium should never be used until biopsy has been taken from the endometrium and every fibroid tumor that is surgically removed should have a pathological examination.

The diagnosis of extra-uterine pregnancy is usually easy. The pain that brings the patient to her knees or to the floor, the irregular uterine bleeding and the low blood pressure associated with anemia make a typical picture. The atypical case offers one of the most difficult problems in gynecological diagnosis. Dilatation of one of the pupils is one of the newer signs of this condition. It is still too early to say how often it occurs. Aspiration of the pelvic peritoneum back of the cervix is a most valuable diagnostic procedure and one that is easily carried out.

Eighty-five per cent of all tumors or masses behind the cervix are due to one of the five following conditions: cyst, retrodisplacement, inflammatory disease, extra-uterine pregnancy and fibroids. These are easily remembered by the word "crief," the letters in the word being cipher to the word or diseased condition. This is also a most practical chart for bedside use. A complete history, physical and pelvic examination and the occasional use of the aspirating needle back of

the cervix should establish a diagnosis in the great majority of cases.

Endocrine dysfunction accounts for almost 50% of cases of uterine bleeding. The most common of the endocrine disorders is due to non-ovulation and an absence of progestin, producing a hyperplasia of the endometrium. This bleeding may come as a menorrhagia or it may come with both menorrhagia and metrorrhagia. It is not unusual for the patient to spot for a time before the period or even after it. Periods of amenorrhea are not unusual. It occurs at any time from menarche to menopause but the majority of cases are seen between 30 and 45 years of age. It is not unusual for this condition to appear at menarche. The bleeding at times is severe and a very low grade of anemia is the natural result. Digital and instrumental examination often fail to show anything abnormal. A cystic condition of the ovary or ovaries is not an unusual accompaniment. The cysts vary in size from a walnut to an egg. The great majority of the cases can be cured by medical treatment. Dietary regime is most important—some of these patients need a reducing diet—others a fattening diet, and in those cases where anemia is marked a high protein diet is indicated. The anemic cases should also have iron internally. A great many of these cases need thyroid; to my mind it is the most reliable of all remedies used for this condition. It is of course contra-indicated where a hyperthyroidism is present and in such cases Lugol's solution and rest will often bring about a cessation of the bleeding. Proprietary remedies made from the urine or blood of pregnant women such as Antuitrin "S" or Follutein have in our hands been valuable aids in the treatment of bleeding from ovarian dysfunction. Their efficacy is due to their stimulating the anterior pituitary which in turn stimulates the ovaries. Our method of administration is to begin using them the first day of the bleeding and giving them in 1 c.c. doses hypodermically each day until the bleeding stops. Surgery is rarely indicated but there is always to be found a recalcitrant case in which the ordinary remedies fail. Curettement will stop the bleeding in about 25% of cases. Operation on the ovaries, resections and removal are contra-indicated. Our series and those of others who have studied this condition show that plastic operations on the ovaries or the removal of one of these organs is often followed in time by uterine bleeding due to hyperplasia of the endometrium. For the cases between 40 and 50 years of age that fail to respond to the usual forms of treatment, radium offers an ideal remedy, the dosage ranging from 1,200 to 1,800 milligram hours. X-ray in the hands of those properly trained in its administration is an excellent method of treatment and does not require hospitalization. It seems hardly necessary to emphasize the necessity of biopsy before using either radium or x-ray. For patients of the younger group or in active sexual life, small dos-

age of radium may be used in order to produce a temporary amenorrhea. There is an occasional case during active sexual life in which all remedies fail and a supravaginal hysterectomy with high amputation of the cervix and preservation of the ovaries is necessary. Biopsies are indicated in all cases that do not respond promptly to the usual remedies and this rule also applies to the younger group of patients who are unmarried.

I have endeavored in this paper to discuss the five common causes of uterine bleeding and to show that the practitioner can diagnose and treat many of these. In conclusion may I say that all cases of uterine bleeding are entitled to a careful history, a complete physical examination, a pelvic examination that should be both digital and with the speculum, and biopsies where the conditions demand.

### UNDULANT FEVER (Brucellosis)\*†

With Reference to 148 Cases Encountered in and about Dayton, Ohio

WALTER M. SIMPSON, M. D.

DAYTON, OHIO

On August 19, 1905, the steamship "Joshua Nicholson" stood out from the Island of Malta and set her course for Antwerp. As the rugged silhouette of the Island of Malta disappeared below the horizon, the officers and crew were cheerful over the prospect of a homeward-bound voyage to New York after a short pause at Antwerp. They were also pleased at the thought of having fine fresh milk to drink throughout the long voyage, for the cargo included 65 fine Maltese goats. Shortly before the "Joshua



WALTER M. SIMPSON

Nicholson" steamed away from the Island of Malta, a representative of the United States Bureau of Animal Industry had purchased 61 fine milch goats and 4 billy goats. These goats had been selected from the best herds on the island and were to be used to build up strong healthy herds of milk-producers in this country.

But it was not such a pleasant voyage after all, because 8 of the 12 officers and men who drank the goats' milk became sick. In quarantine at Antwerp it was discovered that the 8 sick men had drunk large quantities of raw goats' milk. Two of the four who escaped the illness had boiled the milk, while the other two had drunk very little of it. Blood tests of the sick sailors left little doubt that they had acquired their sickness from the raw goats' milk. The goats were then trans-shipped on the steamship "St. Andrew." When they arrived

at the quarantine station at Athenia, New Jersey, the milk was found to contain large numbers of the organism known to be the cause of undulant (Malta) fever. The goats were slaughtered, but not until a woman at the quarantine station got the disease.

This news created little excitement in the United States, since the disease was practically unknown here. It is true that the year before, Craig<sup>1</sup>, of the United States Army, had discovered the occurrence of the disease in a nurse who had never been out of this country. Craig suggested at this time that many patients with typhoid-like fevers might be actually suffering from undulant fever. A few cases of the disease were reported from goat-raising areas in Texas, New Mexico and Arizona in 1911 and 1912<sup>2</sup>. Then the disease apparently faded from medical consciousness for a decade, when Lake and Watkins<sup>3</sup> published their startling report of an epidemic of undulant fever in Phoenix, Arizona, which they traced to the infection of raw goats' milk.

Up to this time it was perfectly natural for physicians to associate undulant fever only with a goat source of infection. On the Island of Malta and in countries bordering on the Mediterranean Sea the disease had been widely prevalent for many years. During the Crimean War (1854-56), an obscure irregular fever played havoc with British troops quartered in Mediterranean areas. This excited British investigators to seek the cause. After a long search, David Bruce<sup>4</sup>, while studying the disease on the Island of Malta, discovered the causative organism and called it *Micrococcus melitensis*. A British commission, headed by Bruce, studied the disease on the Island of Malta from 1904 to 1907. They demonstrated that the drinking of raw goats' milk containing the undulant fever organism was the common source of infection for human beings. Then came orders prohibiting the use of raw goats' milk by the members of the British military and naval forces quartered there, with an immediate and rapid decline in the occurrence of the disease.

Some eleven years after Bruce's important discovery, Bang<sup>5</sup>, a veterinarian of Copenhagen, made the apparently unrelated discovery that a specific organism, which he called *Bacillus abortus*, was responsible for the common disease of cattle known as contagious abortion.

For twenty-one years the microbes discovered by Bruce and Bang were regarded as separate unrelated species. In 1917 and 1918, while the thoughts of most of the people in the world were centered upon man's destruction of man in the muddy trenches of France, a quiet, modest woman-researcher in the laboratory of the Public Health Service at Washington, Alice Evans<sup>6</sup> by name, discovered that the *Micrococcus melitensis* of Bruce and the *Brucella abortus* of Bang were, for all practical purposes, the same. In the announcement of her discovery she made this prophetic sugges-

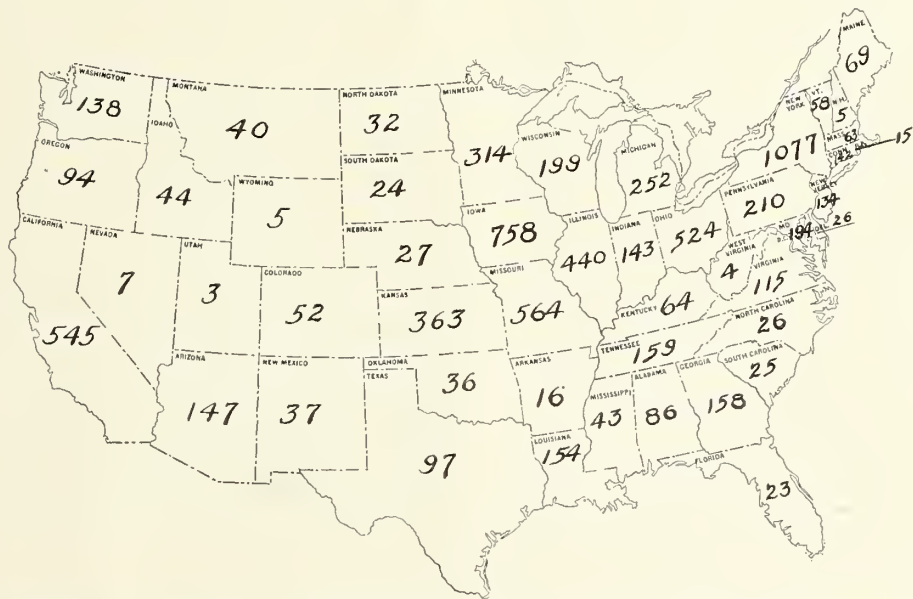
\* From the Diagnostic Laboratories of the Miami Valley Hospital, Dayton, Ohio.

† Presented before the General Meeting of the Indiana State Medical Association, Indianapolis, October 11, 1934.



tion: "Considering the close relationship between the two organisms, and the reported frequency of *Bacillus abortus* in cows' milk, it would seem remarkable that we do not have a disease resembling Malta (undulant) fever prevalent in this country." What has happened since that time has brought complete fulfillment of Alice Evans's prophecy. After another lag of five years, Keefer<sup>7</sup>, of Johns Hopkins Hospital, reported the first case of undulant fever in this country caused by the Bang (abortus) organism. Then came a report from South Africa<sup>8</sup>, followed by others from far corners of the earth, proving that undulant fever is commonly contracted from cattle infected with the organism of contagious abortion. It became more and more apparent that undulant fever in human be-

American physicians were quick to recognize that these findings provided an explanation for their failure to arrive at a confirmed diagnosis in many cases of typhoid-like or malaria-like diseases. The medical journals soon reflected the alertness of many physicians in the publication of an ever-growing number of cases. In 1926, 46 cases were reported; in 1927, 217; in 1928, 649; in 1929, 952; in 1930, 1,420; in 1931, 1,351; in 1932, 1,326; in 1933, 1,659. To this total of 7,620 cases, officially recorded by the U. S. Public Health Service during the past eight years, must be added the incalculable, but undoubtedly large, number of cases which have not been recorded or have escaped recognition. In addition to recorded cases from every state in the Union, there were reports of many cases in Canada,



Distribution of reported cases of undulant fever in the United States up to January 1, 1934 (USPHS).

ings was most prevalent in those districts in which contagious abortion of cattle was widespread. It was also established that the disease existed in swine and that human beings often acquired the disease from that source.

In 1926, Carpenter<sup>9</sup> found the organism in the milk of two-thirds of a group of cows with contagious abortion. Soon after, he<sup>10</sup> recovered the same organism from the blood of ten human beings with undulant fever. He injected five pregnant heifers with these organisms; all promptly aborted. One of the heifers was not slaughtered for six months, during which time she continued to eliminate the organism in large numbers in her milk. Now the cycle of fact-finding was complete; the organism which produces contagious abortion in cattle, swine, goats and other domestic animals was found to be capable of producing in human beings a disease indistinguishable from the Mediterranean type of Malta fever.

Denmark, Sweden, Norway, Germany, The Netherlands, Switzerland, France, Italy, Greece, Southern Rhodesia, Tunisia, Algeria, New Zealand and other countries in which the disease had apparently escaped recognition for years before the discovery by Evans of unity of the disease in cattle and human beings.

During the past six years the writer has investigated 148 cases of undulant fever in Dayton and the surrounding communities. This undertaking was the result of a determined effort to learn of the incidence of the disease in a circumscribed locality. Stimulated by a similar motive, Hardy<sup>11</sup> has investigated over 700 cases in Iowa, during the past six years. Carpenter<sup>12</sup> in New York, Huddleson<sup>13</sup> in Michigan, Bierring<sup>14</sup> in Iowa, King<sup>15</sup> in New York, Farbar and Mathews<sup>16</sup> in Indiana, Brown<sup>17</sup> in Kansas, Sensenich and Giordano<sup>18</sup> in Indiana, and Ey<sup>19</sup> in Ohio, have conducted similar investigations in their localities; their efforts have like-

wise been rewarded by the discovery of a large number of cases. The inference is obvious that the disease must be much more prevalent than is generally believed.

The findings of Evans made it apparent that the abortus-melitensis group of organisms should be reclassified. Meyer and Shaw<sup>20</sup> proposed that the organisms of this group should be designated by the generic name *Brucella*; this suggestion has met with universal approval. It is believed by some investigators that there are three distinct species of *Brucella*. The organism usually associated with infection in goats is called *Brucella melitensis* (Bruce); the organism of contagious abortion of cattle is usually referred to as *Brucella abortus* (Bang); the organism ordinarily found in swine infections is designated *Brucella suis* (Traum). The *Brucella* exhibit marked pleomorphism; coccoid and bacillary forms, as well as intermediary oval forms, are commonly observed. Attempts to divide the organisms of the genus *Brucella* into distinct caprine, bovine and porcine species (by cultural characteristics, serologic reactions, pathologic changes, hydrogen sulphide and nitrogen metabolism, bacteriostatic action of dyes, utilization of dextrose, nitrate and nitrite reduction, and agglutinin absorption tests) have not been uniformly successful. Organisms which have been designated as porcine or caprine types have been recovered from cows' milk. It seems quite possible that differences in pathogenicity of organisms recovered from different animal hosts are due to host-adaptation. In the light of present knowledge it seems desirable to refer to all of the varieties as *Brucella*. Furthermore, the confusion resulting from the many names which have been used to designate the disease caused by *Brucella* in animals and man would be overcome by the adoption of the single designation *Brucellosis*.

Among urban populations the disease appears to be chiefly transmitted through the raw milk of infected cattle. Of the 148 cases of undulant fever studied by the writer, the ingestion of raw milk containing the organism of contagious abortion of cattle was demonstrated to be the source of infection in the great majority of instances; no cases of direct porcine or caprine origin were encountered. These findings are corroborated by the investigations of Carpenter, King, Orr, Huddleson, Farbar, Mathews, Sensenich, Giordano, Ey and others. Hardy expresses the belief that direct contact with infected cattle and hogs has been responsible for a great number of cases of undulant fever occurring in Iowa. Hardy's investigations led him to the conclusion that the abortus and suis varieties of the organism are about equally responsible for the undulant fever morbidity in that state. Hardy<sup>21</sup> has demonstrated by animal experiments that the skin may act as the portal of entry of the organism. Morales-Otero,<sup>22</sup> of Puerto Rico, has reproduced the disease in human volunteers by inoculations with bovine and porcine strains of *Brucella*

*abortus* through abraded skin. It is apparent, therefore, that there are two important sources of infection for man, namely, the ingestion of raw milk or unpasteurized dairy products containing *Brucella*, or direct contact with infected fresh animal tissues.

#### CLINICAL MANIFESTATIONS IN MAN

Because undulant fever presents many symptoms and signs common to typhoid fever, malaria, tuberculosis and influenza, it is frequently confused with these diseases. Many physicians have arrived at a tardy diagnosis of undulant fever only after repeated negative Widal reactions, the failure to demonstrate the malarial plasmodium, and the inability to elicit physical signs or roentgenographic evidence of tuberculosis. Less often, the disease has been confused with acute rheumatic fever, subacute bacterial endocarditis, bronchitis, pyelitis, appendicitis, cholecystitis, or tularemia.

As a result of the more extensive studies which have been made during the past few years, it has become increasingly apparent that a majority of the cases of undulant fever present a more or less characteristic clinical picture. The disease appears to occur predominantly among males, particularly in rural districts. Young and middle-aged adults are most often affected. Children appear to possess some degree of immunity to the disease; ten per cent of the patients in the Dayton series of cases were children in the first decade of life.

The incubation period has been found to vary from five days to three weeks; the average incubation period is two weeks. The prodrome is not unlike that of any general infection, although in occasional cases the disease is initiated with a chill and a rapid elevation of temperature to 103-105° F. Ordinarily, the patient becomes gradually aware of an afternoon or evening rise of temperature, associated with chills, nocturnal perspiration and marked weakness. The fever, chills and sweats usually pursue a characteristic course. The patient usually feels quite well in the morning, particularly in the early stages of the infection. As the daily elevation of temperature develops, usually during the afternoon or evening, the symptoms return. The nocturnal exacerbations of fever occasionally reach great heights (106-107° F.). The average maximum fever is 103° F. There is often a remarkable disparity between the subjective sense of feverishness and the extent of fever as registered by the clinical thermometer; in many instances the patient does not complain of fever nor does he present a febrile appearance, but the physician finds, to his great surprise, a fever of 102° to 103° F. As the fever abates, chills and sweating occur. If defervescence is rapid, the perspiration is more likely to be of a drenching character. The chills are sufficiently severe to be regarded as true rigors in about one-third of cases. There has been no history of chills in about ten



per cent of patients who have experienced fever and sweats.

Marked restlessness and insomnia usually accompany the nocturnal febrile exacerbations. Delirium occurs in some cases in which the fever reaches great heights. Ordinarily, the mental state remains clear during the febrile course of the disease; the so-called "typhoidal state" is rarely, if ever, observed.

The matutinal remissions and the nocturnal exacerbations of fever may last from one week to several months. The name "undulant fever" refers particularly to recurring relapses of fever. Such febrile relapses appear to be the exception rather than the rule in the recently described American cases; most patients have experienced but one febrile period, lasting from one week to several months, and finally reaching the normal level by lysis.

The essential gastro-intestinal complaints are anorexia and constipation. The degree of constipation appears to parallel the severity of the infection. Diarrhea is of rare occurrence. Loss of weight is an almost constant feature of the disease. Patients experiencing a severe infection will often lose from twenty-five to fifty pounds in weight.

With the exception of such signs as fever, weakness and loss of weight, there is often a remarkable absence of positive physical findings. The spleen is palpable in about one-third of the cases. Tenderness or pain in the joints, or muscles, or both, is likewise observed in about one-third of the cases. The presence of transient migrating polyarthritis, particularly of the larger joints, has led to confusion with acute rheumatic fever. No permanent impairment of the joints has been observed.

Abdominal pain is a prominent complaint in about twelve per cent of cases; this is most common early in the course of the disease. The pain may be generalized or confined to any one of the abdominal quadrants. There are many instances on record of needless, and perhaps harmful, surgical intervention in cases of undulant fever in which the abdominal symptoms were a prominent feature of the disease.<sup>23</sup>

Symptoms referable to the genito-urinary tract have appeared in some cases. There is evidence that the *Brucella* occasionally exhibit the same predilection for the genital tract of human beings that it does in cows or bulls. Painful swelling of the testes occurs in about ten per cent of cases. This complication is usually transient, but in occasional instances suppurative orchitis and epididymitis have occurred.

There is some evidence that *Brucella* infection may be a factor in certain cases of abortion in women. The literature contains many reports of human abortion occurring on farms where contagious abortion of cattle was common. Kristensen<sup>24</sup> isolated the abortus variety of the organism from

the exudate which covered the uterine site of the placenta of a seven months' fetus. Carpenter<sup>25</sup> has recovered the organism from the tissues of a human fetus which was aborted at the end of the fourth month of gestation. Frei<sup>26</sup> has isolated *Brucella* organisms from the vaginal discharge of a woman who had aborted ten days previously. Other investigators, notably Harbinson,<sup>27</sup> Ey, and the writer,<sup>28</sup> have found strongly circumstantial serologic evidence that *Brucella* infection was a factor in the production of several cases of human abortion.

A skin eruption, usually macular or maculopapular, is a relatively infrequent finding; the skin lesions may simulate the roseola of typhoid fever. Hematologic studies usually yield important information. Some degree of secondary anemia, usually proportionate to the severity of the illness, is almost invariably present. The great majority of cases exhibit leukopenia, with the white blood cell count ranging from 4,000 to 6,000. A relative, and in some cases an absolute, lymphocytosis usually accompanies the leukopenia. Occasional patients with the mild form of the disease show very little deviation from the normal as regards the blood picture.

The urinalysis usually reveals the trace of albumin commonly found in febrile diseases. The cerebrospinal fluid may show slight lymphocytosis and an increased sugar content, but in most cases shows no abnormalities.

#### CLINICAL TYPES

Five types of the disease are generally recognized: (1) intermittent, (2) ambulatory, (3) undulatory, (4) malignant, and (5) subclinical.

(1) *Intermittent Type.* The majority of cases which have been observed in the United States fall into this group. The disease pursues a subacute course, with fever of an intermittent character; the morning temperatures vary from normal or slightly subnormal to 100° F., while the evening temperatures usually range from 101° to 104° F. The average duration of this type of the illness is from three to four months.

(2) *Ambulatory Type.* Approximately one-fourth of the cases are characterized by a relatively short and mild illness. Many persons in this group will remain at their work although aware of the existence of mild fever and a marked sense of weakness. The symptoms and signs of this form of the disease are essentially the same as in the intermittent type, except that they are much less severe. Such cases are frequently confused with influenza.

(3) *Undulatory Type.* This form of the disease is characterized by the occurrence of relapses. This feature of the disease was said to be of frequent occurrence in the Mediterranean cases, but has been present in only about fifteen per cent of the cases which have occurred in this country. The successive relapses usually decrease in intensity

and duration. Such cases usually pursue a more chronic course than the other forms of the disease. Physical and mental deterioration are more commonly observed in the undulatory form of the disease than in the other forms.

(4) *Malignant Type.* This form of the disease is rare, having occurred in only about two per cent of the cases reported in this country. A sudden onset, an acute course with extreme hyperpyrexia and a fatal termination in the majority of cases are the characteristics of this unusual form of the disease. The duration of this type of the disease is usually from one to three weeks.

(5) *Subclinical Type.* Subclinical *Brucella* infections have occurred in persons who have been exposed to the infection; antiabortus agglutinins have been demonstrated in the serum of such persons in the absence of clinical symptoms or signs of the disease. Carpenter, Boak and Chapman<sup>29</sup> have submitted convincing evidence that antiabortus agglutinins develop only when there has been actual invasion of the tissues by living *Brucella* organisms. There is no evidence that agglutinins are passively absorbed in the intestine from milk containing killed organisms.

#### DIAGNOSIS

If undulant fever is given consideration in the differential diagnosis of all cases of febrile illness, especially in those in which the diagnostic criteria for typhoid fever, tuberculosis, influenza, malaria, chronic bronchitis, pyelitis, rheumatic fever or bacterial endocarditis are not convincing, the disease will be recognized with much greater frequency. This is true in cases of vague mild febrile disease as well as in those in which the clinical manifestations of undulant fever are more clearly defined. In such cases it should become an established practice to submit 4 or 5 c.c. of the patient's blood, collected exactly as for the Wassermann test, to a laboratory equipped with the proper antigens for the agglutination test. The rapid macroscopic agglutination method of Huddleson<sup>30</sup> is a simple and reliable procedure.

Antiabortus serum agglutinins may appear as early as the fifth day, but in most instances they appear sometime during the second week of illness. It is, therefore, unwise to collect the blood specimen for the agglutination test until a week or ten days after the onset of illness. In occasional cases agglutinins will not appear until the third or fourth week of illness. The agglutination titer rises to variable heights during the acute course of the disease and tends to fall when the fever abates. Ordinarily, agglutination in dilution of 1:160 to 1:1280 will be found during the fourth or fifth week of illness. Many persons will retain antiabortus serum agglutinins for many months or years, while in other cases they will entirely disappear a few months after recovery.

There is convincing evidence that about 5 per cent of individuals with undulant fever, from whose

blood the organism may be recovered, fail to develop antiabortus serum agglutinins. Furthermore, some patients who exhibit a well-defined clinical picture of undulant fever, and from whose blood *Brucella abortus* has been recovered, will show agglutination in titers below 1:80. It cannot be said, therefore, that there is any arbitrary diagnostic agglutination titer. For practical purposes diagnostic significance is usually attributed to agglutination in dilutions of 1:80 or above. In patients in whom the clinical manifestations are strongly suggestive the absence of agglutinins or the presence of agglutinins in titers of 1:10 to 1:40 should stimulate further serologic and bacteriologic studies. The skin test, using an abortus antigen, appears to be of value in differentiating the cases in which agglutinins are absent or are present in low titer. This is done by injecting intradermally one-tenth of one c.c. of a saline suspension of heat-killed or formalin-killed abortus organisms, adjusted to a standard of two billion organisms per cubic centimeter. We utilize the same suspension for skin testing and for vaccine therapy. A positive test is characterized by the gradual development, usually within twenty-four to forty-eight hours after injection, of an indurated reddish area, usually about 3 to 5 centimeters in diameter. The induration usually persists for many days.

The occasional cross-agglutination of the *Brucella* and *Bacterium tularensis* should be borne in mind. Francis and Evans<sup>31</sup> have suggested that all serums from suspected cases of tularemia or undulant fever should be tested for both anti-tularensis and antiabortus agglutinins, unless the clinical history points definitely to a recognized source of infection for either undulant fever or tularemia. If it should develop that the abortus and tularensis titers are the same, or nearly the same, agglutinin absorption tests will distinguish between them. The writer<sup>32</sup> has found abortus-tularensis cross-agglutination in 22 of the 109 cases of tularemia and in 28 of the 148 cases of undulant fever which he has investigated.

Since a bacteremia is present in this disease an attempt to recover the organism by blood cultures should be made whenever possible. Blood for cultures should be collected early in the course of the disease and preferably at the crest of one of the pyrexial waves. The likelihood of recovering the organism is greater if broth mediums are inoculated directly; the carbon dioxide requirement of certain strains should be borne in mind.

Urinary specimens for culture should be collected through a sterile catheter. Amoss<sup>33</sup> has described a successful method for the recovery of *Brucella* organisms from feces. The same precautions should be exercised in disposing of the urine and feces of undulant fever patients as with those suffering from typhoid fever.

Guinea pigs may be inoculated intraperitoneally with the patient's blood or saline suspensions of



macerated tissue. Six to eight weeks should elapse before autopsy. Loss of weight, the presence of enlarged joints, enlarged testes and seminal vesicles, small whitish foci of necrosis in the enlarged liver, spleen and lymphnodes should be noted. Cultures should be made from the lungs, liver, spleen, kidneys, testicles and lymphnodes.

#### PROGNOSIS

Fatal outcome is rare, having occurred in from one to four per cent of reported cases; during 1931, 74 deaths were officially recorded by the United States Public Health Service as having been due to undulant fever. The importance of the disease is not to be judged by the death rate. The prolonged course and resulting invalidism make the outlook much more serious than the death rate would indicate.

#### TREATMENT

The most important consideration in the control of undulant fever is prophylaxis. The widespread distribution of the infection among cattle renders it difficult to control the infection at its source. Many cows have Bang's disease and eliminate the organisms in large numbers in the milk and vaginal discharges without manifesting symptoms of the disease (abortion, mastitis, sterility and lessened milk yield). While veterinarians are striving to find more simple and effective methods to eliminate the infection among animals, there appears to be but one logical method for preventing the transmission of milk-borne infection to human beings, and that is by pasteurization. Park,<sup>34</sup> Boak and Carpenter,<sup>35</sup> and Zwick and Wedeman<sup>36</sup> have demonstrated that complete pasteurization (143-145° F. for 30 minutes) will destroy the *Brucella*. The need for strict supervision of the pasteurization process is apparent. For the protection of the health of those persons whose occupations bring them in direct contact with infected animal tissues we must rely upon education and the institution of precautionary measures.

Since the passage of a universal pasteurization ordinance in Dayton three years ago, not one case of the disease has originated in the city.

The rapidly accumulating knowledge of the widespread distribution of undulant fever has done much to focus the attention of public health workers, veterinarians and milk producers upon the urgent necessity of eliminating milk-borne infection among human beings. While some progress has been made in the control of the infection in certain herds by eliminating reactors, physicians and public health workers should be guided by the advice offered by Alice Evans:<sup>37</sup>

"For the protection of milk consumers the preventive measure is quite obviously the same as that practiced for the prevention of other infectious diseases that are spread by milk, namely, pasteurization. Those who are able to pay the price for certified milk may take raw milk with a reasonable degree of safety, if the certification guaran-

tees that the milk is from an abortion-free herd. No milk other than that so certified, or pasteurized milk, can be considered safe, for the cattle disease is widespread everywhere in the United States. It is fortunate that the preventive measure of pasteurization is so easily available."

For those persons who live on farms, or in small communities where pasteurization is not yet practiced, home pasteurization may be carried out by placing the milk in an aluminum vessel and heating it to 155° F., stirring constantly; then immediately setting the vessel in cold water and continuing the stirring until cool.

The treatment of the disease in human beings has been essentially directed toward alleviation of the prominent symptoms. Mercurochrome, acriflavine, nearsphenamin, quinine, and nonspecific protein therapy have been advocated by several physicians. For the most part these therapeutic observations have not been subjected to adequate control and the very length of the list argues against the specificity of any of these measures.

Many observers have reported favorable results with specific vaccine therapy. The writer has prepared and utilized a *Brucella melitensis* (abortus) vaccine, standardized to two billion heat-killed or formalin-killed organisms per cubic centimeter, in the treatment of 72 of the local cases, and has distributed the vaccine to some 400 physicians in various parts of the country, with results which appear to justify its use. Comparison with a series of untreated control cases appears to indicate that the vaccine usually terminates or shortens the course of the disease and prevents recurrence. This vaccine is now available through trade sources.

A febrile reaction usually follows the injection of the vaccine, accompanied by an increase in the intensity of symptoms. When the dosage is increased a more marked general reaction frequently occurs; the injection of a like amount of vaccine three days later will ordinarily not produce so marked a reaction. If a second marked febrile reaction should occur the dosage should be reduced to half of that amount which produced the reaction for at least two injections, after which the dosage may usually be increased without the development of severe reactions. Following the development of a general reaction, the fever usually exhibits a declining trend. The response to vaccine therapy has been best in those patients who have experienced one or two rather severe systemic reactions. The average course of vaccine therapy requires approximately 10 c.c. of the vaccine. Larger doses may be required in the chronic form of the disease.

I. F. Huddleson,<sup>37</sup> of Michigan State College, East Lansing, Michigan, has utilized a broth filtrate of *Brucella* organisms, known as "Brucellin," in the therapy of this disease, with apparently good results. Lee Foshay and A. E. O'Neil,<sup>38</sup> of the Department of Bacteriology, University of Cincinnati, have developed an antiabortus goat serum, which

is apparently effective during the first three months of the disease. Since undulant fever is often characterized by natural remissions, the value of any therapeutic measure must be interpreted with caution.

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## FUNDAMENTALS OF INFANT FEEDING\*

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One is led to believe from occasional remarks in the pediatric literature that infant feeding is no longer a problem of major importance. It is true that great progress has been made and that many difficult questions have been answered. Nevertheless, wide gaps in our knowledge of the infant's digestive mechanism still exist. Furthermore, there is a considerable need for a thorough dissemination of the facts already at hand.

Textbooks are often more confusing than helpful because of the redundant discussions of a variety of methods and systems of infant feeding. As a result the busy physician has turned to the briefer literature distributed by commercial houses. Some of the information from these sources is authoritative; much is fragmentary and unreliable.

The purpose of this paper is to present a few fundamental principles of infant feeding and to call attention to a simple working method of prescribing milk formulae of adequate strength and composition.

In the preparation of a formula, cow's milk is nearly always the basic ingredient. Needless to say, it should be clean and free of pathogenic organisms. Cow's milk is intended for the calf and usually requires some modification for the digestive system of the infant. All the methods of feeding aim at rendering the casein of cow's milk more digestible. This is done in a variety of ways: by simple boiling, by the process of evaporation or drying, or by adding acids—lactic, citric, hydrochloric or acetic (vinegar), or by adding alkalies such as lime water, sodium bicarbonate, or sodium citrate.

Many years ago the alkalies were used; more recently acidification was fashionable. At the present time processed milks, the so-called "canned milks" which formerly were frowned upon, are generally used. It is confusing and seemingly irrational to think that all these divergent agents and reagents could be given successfully. The infant must be a versatile and hardy animal. Yet with all the apparent diversity these methods have one common factor, namely, a rendering of the casein more digestible. It is my belief that the use of the heat-treated milks such as boiled fresh milk or dried milk or evaporated milk is not only simpler but is more successful as a routine. This leaves the acidified and the alkalized milks for use only in selected cases.

That modification of cow's milk is needed no one will seriously question, but the attempt to modify it to resemble breast milk quantitatively is unsound because of the vast difference in the quality of the protein constituents. The modification of cow's milk should not be an attempt to simulate breast

milk. It should aim at the production of a digestible formula not too dilute and at the same time not too concentrated. The mixture should contain proteins, fats and carbohydrates in sufficient quantities to assure proper growth and development.

### COMPONENTS OF THE FORMULA

The method herein advocated for the planning of an adequate formula for the normal infant may be clarified by a brief discussion of the following points: (1) The fluid requirements; (2) the protein needs as supplied by the milk used; and (3) the carbohydrate addition.

*Fluids.* A liberal supply of fluids is essential. It is a good plan to incorporate a large portion of the required fluids in the formula in order to reduce the rather abundant protein, fats and salts of cow's milk and to permit the addition of essential carbohydrates without undue concentration. Furthermore, the addition of water to the formula reduces the necessity of giving so much fluid between feedings, thus allowing longer rest periods. It is estimated that the infant's fluid requirement, including the milk, is at least  $2\frac{1}{2}$  ounces per pound of body weight per day. In order to assure an abundance of fluid, boiled water must be offered several times daily between feedings. Water should not be forced. If it is needed the infant will take it; if not, his fluid needs are being fulfilled with the formula.

*Protein.* Adequate protein intake is of primary importance for proper growth and development. Without protein there is no growth and development. There are many proteins in nature, but all do not have the same growth-promoting value. The growth-promoting properties (or the biological value) of a protein is determined by the abundance or the lack of certain amino acids, which are the building stones of the protein molecule. Lactalbumin and casein are two proteins common to all milks. Lactalbumin is one of the richest sources of certain of the indispensable amino acids. Casein is not a good source of some of them, while at the same time it constitutes a large portion of cow's milk proteins. Lactalbumin, on the other hand, constitutes the larger part of breast milk proteins. Obviously the infant must have a greater quantity of protein for his growth needs when cow's milk is given than when breast milk is supplied.

The old method of extreme dilution of artificial formulae originated because of the fear of cow's milk protein. Modern infant feeding methods have proved that this is an unwarranted fear. Most of the alleged colic in infants is simply hunger due to the practice of generous watering of the milk mixtures. Colic usually disappears when these hungry infants are fed milk instead of water. In spite of these facts the excessive dilution of cow's milk is a custom adhered to by many physicians. This practice of starving infants is perpetuated because the literature on the subject of infant feeding frequently mentions only the minimum and not

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the optimum amount of milk to be used to fulfill the protein needs. As a result tables compiled for the use of physicians usually recommend the minimum 1½ ounces of milk per pound of body weight per day. The provision of 1¾ to 2 ounces of cow's milk per pound of expected weight comes nearer supplying the proper amount of protein. The boiling of fresh cow's milk for about three minutes renders the casein digestible and reduces the possibility of the formation of any large, tough, indigestible curds in the stomach. It is necessary also to boil "pasteurized" milk for the purpose of rendering the casein more digestible and to assure proper sterilization. The use of dried or evaporated milks in the formula still further reduces the possibility of tough curd formation.

*Carbohydrates.* Cow's milk contains a little more than half the amount of carbohydrate found in breast milk and experience has shown that the infant's formula must contain at least the same amount of sugar as is found in breast milk. Since cow's milk usually is diluted, and since it already contains comparatively small amounts of sugar, the necessity of adding sugar to the formula becomes obvious. Furthermore, sugar is the ideal type of food to increase the energy value of the formula because it is assimilated with the least effort. The carbohydrate needs are fulfilled if one simply adds one-fourth ounce of sugar to each five ounces of total formula. The type of carbohydrate added to cow's milk mixtures usually is a matter of individual preference. Some physicians prefer malt sugar; others cane sugar or lactose. A sugar of the dextri-maltose type seems to be the most consistently and universally satisfactory.

DESIGNING THE FORMULA

Limitations which apply to any method of designing a formula are as follows: (1) The formula should not call for more than one quart of milk in twenty-four hours; (2) the total formula should not exceed forty ounces and it is perhaps better not to exceed thirty-five or thirty-six ounces; and (3) added sugar should not exceed one and one-half or two ounces.

All calculations should be based on expected weight rather than actual weight. Undernourished infants continue to be underfed if the formula is prepared according to actual weight.

In planning a formula attention is called to the fact that it is necessary to remember only the following three points:

1. Two and one-half ounces of fluid (including the milk) per pound of expected weight. Note that this figure also determines the total quantity of the day's formula.
2. One and three-fourths to two ounces of milk per pound of expected weight to fulfill the protein requirements for growth.
3. One-fourth ounce of carbohydrate for each five ounces of total formula.

In order to illustrate the simplicity of prescribing a formula with this method two examples are offered.

Some physicians prefer to use the slightly more dilute formulas for the very young infants; therefore, as the first example, a formula will be planned for an eight-pound infant, allowed 1.75 (1¾) ounces of milk per pound.

Total fluid (and total volume of formula), allowing 2.5 ounces per pound .....  $8 \times 2.5 = 20$  oz.  
Boiled milk, allowing 1.75 ounces per pound .....  $8 \times 1.75 = 14$  oz.  
Water in sufficient quantity to bring volume to the desired level .....  $20 - 14 = 6$  oz.  
One-quarter ounce of sugar for each five ounces of total volume is needed. When Dextri-maltose is used in preparing the formula, one level tablespoonful conveniently represents one-quarter ounce.  
20  
— = four quarter-ounce portions of sugar or four  
5 level tablespoonfuls of Dextri-maltose.

The final formula would then be:  
Milk ..... 14 oz.  
Water ..... 6 oz.  
Dextri-maltose ..... 4 level tablespoonfuls  
As a second example: A ten-pound infant, allowing a little more generous supply of milk or two ounces per pound of body weight.  
Total fluid .....  $10 \times 2.5 = 25$  oz.  
Boiled milk .....  $10 \times 2 = 20$  oz.  
Water .....  $25 - 20 = 5$  oz.  
One-quarter ounce portion of sugar (or one level tablespoonful Dextri-maltose) for each five ounces of total volume.  
25  
— = five quarter-ounce portions or five level ta-  
5 blespoonfuls of Dextri-maltose.

The final formula:  
Milk ..... 20 oz.  
Water ..... 5 oz.  
Dextri-maltose ..... 5 level tablespoonfuls

When the calculations begin to call for increasing proportions necessitating the use of more than a total of 35-36 ounces, it is perhaps well to begin adding less water and less carbohydrate. However, no very serious objection can be offered if the total formula reaches 40 ounces. On the other hand, by the time the infant reaches this stage of development a considerable part of his nutriment will be derived from foods other than his formula so that 40-ounce mixtures are rarely necessary.

One of the fundamentals in infant feeding is the recognition of the fact that the infant is an individual and that all rules and customs are subject to modification. The method of infant feeding should be adapted to the infant; not the infant to the method.

If the formula is prepared according to the principles outlined above the infant will be neither



starved nor stuffed. This method is not offered as a solution of all feeding problems. It, in common with all other methods or systems, should be used as a starting point or as a guide. Subsequent adjustments in the food and water requirements should be made according to the infant's individual needs.

#### FEEDING INTERVAL

The interval between feedings should be the one best suited to the particular type of infant being fed. Experience has taught us that a three or four-hour schedule is, as a rule, desirable. Normal infants on a proper formula practically never require food oftener than every three hours. Many infants do well from the beginning on a four-hour schedule. On the other hand, it is an injustice to place a small, hyperactive and hypertonic infant on a rigid four-hour schedule just because someone has said or written that all infants should be fed every four hours. The active, hypertonic infant needs food at more frequent intervals than the quiet, placid infant who sleeps most of the time. The stomach does not empty by the clock, so why should we presumptuously demand that the hungry infant wait for the exact and arbitrarily appointed hour? This is not a recommendation that the infant be fed every time he cries, but it is a suggestion that he be trained gradually to expect food at regular intervals. A few days will determine whether the infant can be trained to the more desirable four-hour schedule or whether he is the type that requires food at approximately three-hour intervals.

The four-hour schedule, when practical, is perhaps the most desirable for the infant and the mother because it allows longer rest periods for both. Nevertheless no one can say at what exact age an infant must be changed from a three to four-hour schedule. One often reads that infants up to a certain age should be fed at three-hour intervals and after a certain age at four hours. The logical course to follow is to feed the active type of infant every three hours until he is old enough to wait four hours. Some babies can be changed to a four-hour schedule at two or three weeks, others not until they are two or three months old. If the quantity and quality of the formula is adequate practically all infants will begin sooner or later to show signs of losing interest in some of the bottles when offered at three-hour intervals. This is the time to switch to the four-hour schedule.

#### THE AMOUNT OF FORMULA OFFERED

The almost universally practiced method of dividing the baby's formula into a given number of bottles, all containing the same amount, is very convenient for the prescriber but hard on the baby. Perhaps the only justification for this practice is to avoid contamination and to make feeding less difficult for the mother. Nevertheless, the system is wrong. One need have little fear of gross con-

tamination when the mother is reasonably intelligent and when modern refrigeration is available. Not one of us could divide our daily rations into three equal parts and be able to tolerate the same amount at each meal. Yet mothers are told to give the infant a certain number of ounces at certain specified intervals. The infant often is forced to consume a given number of ounces whether he wants it or not and then mother and doctor are upset because the baby vomits. On the other hand the baby may be very hungry, yet he cannot have more than the amount provided in that particular bottle.

The breast-fed infant escapes these volumetric restrictions and happily takes all he wants at each feeding whether it be two ounces or ten ounces.

It seems to me that the only common-sense way to feed the bottle baby is to calculate the day's formula, determine the number of feedings required according to whether the three or four-hour schedule is used, and instruct the mother to offer the infant as much as he wants at each feeding. It will be found that unless he has been grossly underfed he will not demand more than the total amount prescribed and that the amount taken at different feedings may vary several ounces. The holes in the nipples should be large enough, the actual feeding time should not exceed fifteen

Food	AGE	QUANTITY
Viosterol in Halibut Liver Oil	½-1 month	10 drops daily
Cod Liver Oil	½-1 month	1 tsp. 3 times daily starting with ½ tsp. t. i. d.
Orange juice	1 month	1 tsp. diluted at first with an equal quantity of water. Increase 1 tsp. each week to 1-2 oz.
Cereal Pablum Meads Cream of Wheat Oatmeal	3-4 months	1-3 tablespoonfuls
Pureed Vegetables Vegetable soup	4-5 months	1-3 tablespoonfuls
Egg Yolk	5-6 months or earlier	½ tsp. partially cooked or hard boiled increased with tolerance.
Ripe Banana	6 months	¼ mashed banana increased to tolerance to a whole banana
Pureed Apricots Pureed Prunes Apple sauce	6 months	1-3 tablespoonfuls
Toast, Zwieback or Crackers	7 months	A small piece in afternoon
Cottage Cheese or Gelatin	8-9 months	Given with fruit in the evening
Custards, Tapioca, Junkets	10 months	1-3 tablespoonfuls
Meats— Beef Chicken Liver Whole Egg scrambled or boiled	10-12 months	1-3 tablespoonfuls

to twenty minutes, and the infant should not be forced to take four ounces or eight ounces simply because there are that many ounces in the bottle.

#### ACCESSORY FOODS

While milk is of primary importance in the infant's diet and is capable of sustaining life over long periods, it has its limitations and its deficiencies. The necessity of adding other foods to the diet is now generally recognized. Contrary to the belief of a few years ago, the infant not only tolerates a variety of foods at an early age but actually needs them.

The preceding table gives a list of the accessory foods and the approximate time they may be added safely to the diet.

Each addition to the diet should be started with a small quantity at first and gradually increased in amount.

While cod liver oil is thought by many to be the choice vehicle of vitamin A and D, it is often difficult to give enough (three teaspoonfuls daily) adequately to protect the small infant from rickets. It is my custom to start at the age of 3 or 4 weeks with Viosterol in halibut liver oil, giving ten drops daily, and then later in infancy change to cod liver oil.

Cod liver oil should be given throughout childhood. The tendency to rickets diminishes rapidly after infancy but the growth of bones and the development of teeth continues. It has been shown that these structures develop with less chance of deviation from normal if the administration of cod liver oil is uninterrupted throughout childhood.

It is important *not* to incorporate the accessory foods in the milk mixture. One of the aims in presenting solid or semisolid preparations at a rather early age is to accustom the infant to foods of different consistencies. Another is to teach him to recognize the spoon as well as the bottle as a source of food.

The order of the addition of foods may be changed according to the physician's preferences. Cereals are recommended first because the infant's digestive system readily adapts itself to the carbohydrates. Cereal is a good food with which spoon feeding may be practiced. Thereafter the giving of other solid foods, approximately in the order listed, usually presents no difficulties.

Pureed vegetables should be added to the diet at the age of four or five months. These foods offer an added source of vitamins and mineral salts, one of the most important of which is iron. Nutritional anemia is uncommon in infants who have had the benefits of accessory foods early in life.

Egg yolk may be added at five or six months or even earlier and is a worthwhile adjunct. It supplies protein, fats, mineral salts, including iron, and is a rich source of vitamin A and contains an appreciable amount of vitamin D. It is conveniently given hard-boiled or soft-boiled and mixed with cereal.

Ripe mashed banana, apple sauce and pureed apricots and prunes at the age of six or seven months not only offer further sources of vitamins and minerals but are valuable in overcoming or preventing any tendency to constipation.

Other additions to the diet can be made rapidly from eight months on until by the end of the first year the infant is taking cooked cereal, vegetables, fruits, and foods rich in protein such as eggs, meats and cheese.

Mothers should begin to teach the infant to drink out of a cup in the latter half of the first year. Often the bottle can be discarded at twelve or thirteen months. Frequently at this age a three-meal schedule can be instituted.

#### SUMMARY

Attention is called to a simplified non-technical method of calculating formulas for normal infants.

Boiled cow's milk, water, and added carbohydrate makes the simplest and perhaps the best artificial formula for the greater number of infants.

Dried milks and evaporated milks have an important place in infant feeding and often can be used more advantageously than fresh milk.

Acidified and alkalized milks are useful in selected cases.

Artificially fed infants require two or three times as much protein as the breast fed because of the differences in value of the protein constituents of cow's milk and breast milk.

The vitamins and minerals in the form of accessory foods are essential for the prevention of deficiency disorders likely to develop on a milk diet.

By the end of the first year the diet should consist of the following:

Approximately one and one-half pints of fresh, boiled, but otherwise unmodified milk, cooked cereals, vegetables, fruits and rich protein foods such as eggs, meats and cheese.

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## OCULAR MANIFESTATIONS OF SYSTEMIC DISEASE\*

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The universal pity and consideration accorded to the blind shows how high a value the average man places upon his sight, and the organs of sight, the eyes. Even so prosaic a piece of literature as an insurance company's list of awards offers evidence on this point—the damages allowed for loss of both eyes are the highest upon the catalogue of possible injuries, even loss of both hands. And if the layman, who knows little or nothing of anatomy, however well he may be acquainted with function, is so appreciative of the value of the eye, how much more does the medical man, and even more the ophthalmologist, realize what an important part of the body is the visual apparatus.

The practitioner of medicine, moreover, has long found the eye of value for quite another reason.



This is as an index of systemic pathology. Often the eye presents a clinical picture so clear and definite that the ophthalmoscope alone can make the diagnosis, even though, with all the diagnostic means now at our disposal, no physician would be entirely satisfied to do this. There is probably no way in which one can better determine the precise condition of the circulation, of the changes in the walls of the blood vessels produced by age or disease, than by the use of the ophthalmoscope. Here, long before occult evidence can be found elsewhere in the body, for him who is able to read the eye signs, the danger signals are displayed with unmistakable plainness. No less close is the eye's association with the nervous system. The first evidences of injury to brain or spinal cord are recorded there, quite as plain to the trained observer as is the "wild eye" of the madman, or the "bleared eye" of the drunkard to the ordinary person. It was recently said by an English ophthalmologist, Ernest Clarke, that the living eye may be looked upon as Nature's laboratory, where changes taking place all over the body can be seen and watched. It has been shown that the epithelial cells which cover the ciliary processes of the eye have the same power of filtering out injurious substances as that possessed by the ciliary processes of the kidney. Thus the glomeruli of the renal organs and the vascular plexus of the brain are in reality counterparts, and this circumstance makes it easier to comprehend why affections of the kidney are early reflected by characteristic changes in the eyes.

The ophthalmoscope is without doubt the most useful instrument possessed by the internist who is called upon to treat a nephritic or diabetic patient. The fundus of the eye is the only portion of the normal body where artery, vein and nerve may be clearly seen without in any way interfering with their natural position and function. Not only can we readily see these important structures themselves, we may also observe them in active function, for the tissue of the retina which the vessels supply with nourishment and the nerves with sensation, lies open for observation and study. The retina itself, being made up of highly organized and easily injured or destroyed protoplasm, is exquisitely sensitive to any toxic properties in the blood thus brought to it. And if this blood supply is in any way interfered with—as in arteriosclerosis, for example—the retinal tissue degenerates with far greater rapidity than other, less susceptible structures. This fact again emphasizes how very important it is to include in every general physical examination a scrutiny of the eye-grounds, especially if the disease suspected, or actually known to exist, is likely to be associated with toxemia or degeneration of tissue. And in "checking up" during a course of treatment, the fundus of the eye is an open chart upon which are recorded the progress of a case of diabetes, nephritis, or similar ailment, which the initiated read as readily as the plainest print.

The changes seen in the eye-grounds of the nephritic are due, as has just been mentioned, to alterations in the walls of the veins and arteries, or of the direct effects of toxins actually present in the blood circulating in the retinal tissues. It is not always possible to distinguish which factor is predominant, and indeed, either or both is likely to be equally responsible.

The clinical picture most often seen is that of albuminuric retinitis. This is a regular accompaniment of chronic nephritis and can be identified as follows: All details of the fundus will be blurred and indistinct, this "cloudiness" being most noticeable in the papillar region, where margins and surface detail can never be well made out. Around the papilla white plaques with a peculiar luster can be seen, although these two have faint and uncertain outlines. These plaques sometimes run together, so that they appear as shining masses giving what has been characterized as the "snow-bank" symptom. In this same quarter of the fundus there may also be seen small hemorrhages of varying dimensions. In the macula the white spots take almost the form of a star, while the veins are much engorged, twisted, and so dark in color as to appear almost black. The arteries, however, will appear normal, or nearly so, in so far as size is concerned. The effect on vision is not as great as these marked changes would lead one to suppose. Late in the course of the affection there will be some blurring complained of, and this will always affect both eyes. It is this visual disturbance which frequently brings the patient for the first time under medical inspection, and so it often happens that the ophthalmologist is the first to discover the renal lesion.

The statistics of Bright's disease give retinitis as a symptom in from 9 to 33 per cent of cases, according to the diligence with which different clinics investigate the eye grounds in their routine examinations. If small details are included the percentage will rise at once, for blurring of the disc and minor changes in the walls of the retinal vessels induce a certain amount of pathological change in the eye-grounds when one could not say truthfully that actual typical renal retinitis was present. This typical condition is most commonly seen in subjects from forty to fifty-five years old, far oftener in men than in women (the ratio is usually put at 2:1), but is fairly frequent anywhere in the fourth, fifth, and sixth decades of life.

Albuminuric retinitis is most likely to indicate the condition known as "contracted kidney" in well advanced cases of Bright's disease. The changes in the fundus are generally due to vascular sclerosis, and when this is seen the outcome of the case will in all probability be fatal, so the prognosis given must be guarded, or better frankly grave, as few of these patients survive more than two years from the time the eye symptoms first become manifest.

Albuminuric retinitis is not peculiar to Bright's

disease, but may appear as an ocular symptom of other renal diseases. It is occasionally associated with the albuminuria of pregnancy, or that occurring in the exanthematous diseases—scarlet fever, measles, and so on. When seen in a pregnant woman the fundus of the eye will show a widely extended neuroretinitis with much exudate and area of hemorrhage. This is a very grave symptom and is most likely to be seen in first pregnancies after the sixth or seventh month of the gestation period. Both prognosis and treatment depend entirely upon the obstetrical findings and thus are outside the province of the ophthalmologist.

Retinitis sometimes appears in connection with eclampsia, while the regular evidence of uremia, both of pregnancy and in other conditions, frequently may be a uremic amaurosis, which amounts practically to total loss of vision. When viewed with the ophthalmoscope the fundus will not present many abnormal changes, which will serve to distinguish uremic from albuminuric retinitis. In uremic amaurosis there is often sudden and complete blindness, while in albuminuric conditions vision is blurred and much diminished, but never lost entirely. The permanent results are much less favorable in albuminuric retinitis because the reduction in visual acuity usually persists, whereas full vision will be restored in uremic cases as soon as the kidney condition can be brought under control.

No estimate of the amount of damage sustained by the kidneys can be made from the extent of the albuminuric retinitis observable in the fundus of the eye. Sometimes very extensive retinal change will result from a relatively minor renal affection, while on the other hand badly diseased kidneys may have but a trifling effect upon the retinal picture as obtained by the ophthalmoscope. Nevertheless, the physician in charge of a case of renal disease can obtain great assistance from a constant watch upon the eyes, and no other diagnostic means offers him certain of the advantages readily available by this route.

The earliest signs of arteriosclerosis anywhere detectable in the body are the kinking and increased tortuosity of the small vessels of the retina. If the details of the disc are clouded and its margins indistinct, but no arterial changes are in evidence, one will be safe in predicting an oncoming toxic retinitis generally inflammatory in type. The typical renal retinitis begins with opacity of the retina, hyperemia of the papilla, and areas of hemorrhage. The next stage is one of fatty degeneration, and this eventually is followed by a third and final stage of optic atrophy. The slight retinal haze accompanying the twisting of the vessels characteristic of arteriosclerosis will be the first evidence of this degenerative process. Thus the ophthalmoscope will reveal the beginning of arteriosclerosis long before an increase in blood pressure gives warning that the main arteries of the body have become affected. The fact that it

is possible to detect initial hardening of the arteries of the retina long before the sclerotic condition is manifested anywhere else is due, as Blum says, "to the very insidious nature of the disease." Even when hypertension is present, together with other signs characteristic of this affection, it will be by the ophthalmoscope that the diagnosis is likely to be made. In middle age an individual will often seek the advice of an "eye man" without going through the formality of first consulting his family physician. When something "goes wrong" with the sight of this period of life, nearly everyone feels competent to make the diagnosis for himself. So it happens not infrequently that while examining one who has presented himself to be "fitted for glasses" the evidence of extensive systemic disease will, for the first time, be made manifest.

Whenever irregularities of the retinal arteries appear the examiner should at once be on his guard. In good general health these arteries become less in caliber but greater in number by a gradual but symmetrical system of branching. Should irregularities in the branching be in evidence—if there is either too great widening, or marked narrowing, or any other disparity—it is certain that disease exists. If spasm of the vessels' walls can be noted it means that arterial hypertension has taken place. "Marked irregularity in the caliber of the vessels, marked narrowing of the blood stream in contrast to wider portions elsewhere in the course of the same vessels, particularly if combined with much tortuosity of the vessels, indicates that organic changes have taken place." If other evidence of sclerosis is present the diagnosis will be still further confirmed. If a vein appears compressed where an artery crosses over it, it is safe to conclude that the artery is more or less hardened and atheromatous. Sometimes the arteries will make an impression upon the veins even when the artery lies underneath. Normal arteries will be symmetrically arranged in the retina with graceful and flexible curves. If they appear stiff and more or less rectangular and straight it is a fair indication that the walls are hardened. Degeneration of the retinal veins is evidenced by an irregular increase in the dimensions of their lumina, whereby a sort of beaded effect is produced. This is very characteristic of venous sclerosis. If the normal reflex which characterizes the walls of the retinal vessels is wider than it should be this should at once suggest a beginning hardening of those arteries, and if this widening be very great it means that sclerosis is well advanced. In this last instance there will probably also be hemorrhages and exudates in that portion of the retina immediately adjacent to the affected vessels. In a very advanced stage of the disease the vessels may be all but obliterated, so that instead of artery or vein the examiner sees but a white line to mark its former position.

Of equal importance with nephritis and arteriosclerosis is the evidence pointing to the existence



of diabetes, which is furnished by ophthalmoscopic examination. Many of the ocular changes induced by diabetes bring about refractive errors, so that the subject will begin to "feel the need of glasses" long before anything occurs to suggest the wisdom of urinalysis. The development of short-sightedness, or an increase in such a condition which has already been recognized, is one of the most common forms of ocular change produced by this disease. The myopia will usually be accompanied by changes in the lens, but though diabetic cataract is common it is by no means universal. Refractive changes often make themselves evident very early in the course of diabetes, so that their diagnostic value is considerable and available before anything as definite can be obtained. Almost a half century ago Langford made the statement that "The onset of myopia in patients of fifty years of age and upward without discoverable abnormality in the lenses should always excite suspicion of diabetes." The ophthalmologist who finds that some of his patients of middle age are requiring very frequent changes of glasses will do well to make a special search for an underlying diabetes, which the internist has not perhaps been offered an opportunity to discover.

In both mild and severe cases of diabetes paralysis of the extraocular muscles frequently takes place and is often found in patients who are unaware that they are suffering from any sort of grave systemic disorder. Such paralysis is generally transient. It often improves very much and then will recur with more marked manifestations, depending upon the variations in the diabetic condition. This is particularly true of paralysis occurring early; that which appears late in the course of a diabetes is very likely to be permanent. Any one of the extraocular muscles may be affected, for the probable cause is involvement of the peripheral nerves or nuclear or peripheral hemorrhages. The most frequent ocular involvement in diabetes is paralysis of accommodation, which was noted by the great Teutonic ophthalmologist, Von Graefe, many years ago, when the significance of eye signs in any disease was but little appreciated. Paresis of accommodation is perhaps the more exact term, as the paralysis is only partial in the earlier cases and is often not recognized for what it is by either the patient or his friends. He merely notices that he cannot read as well as he did, which usually brings him to the oculist with a request for "stronger glasses."

Diabetic cataract has been the subject of much discussion and still gives range for considerable variance in opinion. Occurring at an age when cataract often occurs for etiologic reasons quite other than diabetic, it is often difficult, if not altogether impossible, to relate the one to the other. In any event the disturbances in metabolism and the vascular changes induced by diabetes might very well react upon the lens by the formation of cataract or the pancreatic disturbance might be dependent upon some cause still obscure which

finds another manifestation in the affection of the lens.

Nowhere are the changes wrought by diabetes in the eye so evident or so interesting as those discernible in the retina. These are sometimes confused with those of nephritis or may be indistinguishable from them, but true diabetic retinitis is nevertheless clinically identifiable as a degenerative or hemorrhagic process, although if both kidneys and pancreas are diseased the eye findings will be of mixed type, for the diabetic may develop renal lesions, or those whose kidney function is impaired may from some separate cause suffer from glycosuria. It is well known, too, that both sugar and albumin may wholly disappear from the urine of a given patient when there is undoubted clinical evidence that the disease producing either one or the other is still present in the body. A urinalysis made in such a period of latency would not support the findings of the ophthalmologist who reported an albuminuric or diabetic retinitis, but later on his diagnosis would be proved correct. As retinitis is always a late symptom in diabetes, but appears relatively early in nephritis, there is not likely to be any great confusion. By the time the retinal symptoms are found the clinical diagnosis of diabetes will be well established under ordinary circumstances.

Retinal hemorrhages in general, and the small punctate hemorrhages in particular, should always put the examiner on the lookout for diabetes. Such hemorrhages are often associated with those of the conjunctiva. They are quickly absorbed, but as quickly recur, and oddly enough seldom cause the least interference with vision, although they are likely to cause the patient considerable alarm. Hemorrhage into the retina is generally regarded as a terminal symptom and is, of course, a grave occurrence under any condition. The more profuse the hemorrhage, the greater the danger to life, but many diabetics have lived for years after the eye conditions became well advanced, perhaps to die eventually of some wholly unrelated affection.

Hemorrhage into the retina may indicate many other conditions beside those already mentioned. Tuberculosis, scurvy, purpura, anemia, leukemia and various circulatory disturbances are often responsible for retinal hemorrhage. Cerebral apoplexy may direct a hemorrhage toward the retina, but in general sclerosis of the cerebral arteries happens more often than that of the retinal vessels. But it may be taken for granted that if sclerosis affects the retina a similar condition already exists in the arteries of the brain.

Although more attention is usually given to the diagnostic evidences revealed by examination of the retina than to that obtainable by scrutiny of other portions of the eye, it should not be forgotten that other ocular structures are likewise capable of yielding information of importance. The cornea and iris are both capable of supplying diagnostic data of great value concerning the most important systemic diseases. The general employ-

ment of the slit-lamp has done much to increase interest in the study of corneal lesions in particular and such conditions as phlyctenular keratitis in small children and young adults, which was once attributed wholly to tuberculosis, has by the aid of this instrument been related to the gastrointestinal disturbances of bottle-fed babies and the too high carbohydrate diet indulged in by many young people, especially in the laboring classes. The great impetus to the study of vitamin deficiency which the past few years has witnessed has brought out many diagnostic evidences which may be observed in the cornea by those who are trained to seek for them. Syphilis, rickets, and a number of endocrine disturbances, the errors in metabolism likely to be associated with these and certain conditions of focal sepsis all are detectable upon examination of the cornea long before any other physical signs are sufficiently pronounced to make exact diagnosis possible.

The connection between eye symptoms and focal sepsis has received so much attention of late that it might properly make up an entire paper. Therefore, I can make only a few general statements in regard to this phase of my subject and will assume that the theory of focal sepsis is far too well understood by the reader to need any elucidation from me. Yet I am inclined to think that, even well known and hackneyed as this subject is, there are many who are called upon to treat these conditions who do not readily relate focal infection with ophthalmologic lesions. The English ophthalmic surgeon, Ernest Clarke, states that he has seen many cases of retinal hemorrhage, sometimes with exudates, or even with commencing papillitis, where a septic tooth and infected tonsil or inflamed sinus was found, and when the focal sepsis was removed the eye has cleared up completely.

Of the foci of infection most likely to involve the eye the teeth must be mentioned first. It has been estimated that eight cases of dental infection occur to one from any other source. Next in order of frequency come tonsils, accessory nasal sinuses, gall bladder, colon and genital tract (prostate in male and pelvic organs in female). The cornea has been mentioned as the site of indications of focal sepsis, but these are still more apt to be noticeable in the iris and choroid. Because of the close relation of choroid and retina, the retina also is usually involved in any such process of infection. The inflammation is usually subacute, but is characterized by extreme obstinacy and resistance to treatment until the true focal cause is uncovered. Removal of the focus in the majority of cases will remedy or greatly ameliorate the eye condition, but in a fair proportion the discovery of the underlying factor will come too late to be of much service. McCallan, in making a contribution to a symposium of medicine in London, made three divisions of the condition under discussion: (1) those in which cure by removal of the underlying cause can be readily obtained, such as iritis,

corneal ulcerations, chronic conjunctivitis, pathologic lacrimation; (2) those which can generally, but not always, be improved or cured by removal of the infective focus, among which are the exudative type of choroiditis, thrombosis of the vessels of the retina and progressive myopia; and finally (3) those which are not affected in any way by removal of the focus of infection responsible for them—cataract, retinal detachment or glaucoma.

Iritis due to focal infection manifests itself as a "red eye" with profuse lacrimation; corneal ulceration is intensely painful, the affected eye being red and inflamed. Iritis, while not as painful as ulceration, is often distressing, especially at night. In chronic conjunctivitis it is the eyelids which are red and give evidence of inflammation, the pain being neither so intense nor deep-seated as in either iritis or corneal ulceration. Differential diagnosis can only be properly established by means of the ophthalmoscope. It has been noted that the eye affected is likely to be on the same side as the teeth whence the infection originated. Also that the upper jaw is more likely to harbor infection communicable to the eyes than is the lower jaw.

While the majority of eye affections seen in general practice are the products of focal sepsis, there are many other systemic conditions which first manifest themselves by irregularities in the visual apparatus. Those most often encountered will, of course, be tuberculosis and syphilis. Ocular tuberculosis is not so prevalent as the incidence of the underlying disease would lead one to suppose. A survey made a few years ago at a large municipal hospital in Chicago, devoted exclusively to the care of tuberculous patients, disclosed that only one-fifth of one per cent of the active cases in this institution showed any changes in the iris, and but two per cent had any alteration in the fundus of the eye. The last, when seen, were invariably upon one side only, and in but a single patient was it possible to demonstrate tuberculosis, either healed or unhealed, in more than one area of the field. Still the possibility of ocular tubercle bacillus invasion should be kept in mind, especially when patients known to harbor the foci of tubercular infection develop ocular difficulties.

Primary syphilitic lesions of the eye are very rare indeed. Interstitial keratitis is characteristic of the hereditary type of syphilis, being seen in more than half the cases. Iritis is often encountered in the late stages of tertiary luetic infection, for in neurosyphilis the optic nerve and retina are likely to be involved in the general nerve degeneration, so that complete loss of vision is not an uncommon occurrence. The first changes mentioned are usually benefited by active and vigorous antiluetic treatment. The tertiary lesions seldom respond to medication.

A word should also be said concerning the retrobulbar neuritis, which arises not only in the course of diabetes but in the various auto-intoxica-



tions and such poisonings as occur through excesses in alcohol and tobacco. There is no positive proof that the diabetic condition is not identical with toxic amblyopia, because the majority of the diabetics showing the lesions were users of either or both the sources of toxin mentioned. The increased liability of diabetic patients to tobacco amblyopia has frequently been commented upon by textbook writers, such as de Schweinitz and Fuchs. But as the diabetic form has been proven beyond doubt to occur in diabetics who never used either alcohol or tobacco, the distinction is clear enough to permit their separation as clinical entities. Of the characteristic tobacco amblyopia it is hardly necessary to speak when treating of ocular manifestations of systemic disease. The marked increase in the use of tobacco since the World War has brought many more of these cases to the attention of ophthalmologists during the past decade. Treatment is unsatisfactory in the majority of cases because of the difficulty in withholding the source of poisoning.

In such a brief survey of the principal eye conditions which are early or primary symptoms of underlying systemic disease it has not been possible to do more than touch upon a host of interesting features of a subject of great interest to laymen, general practitioners and specialists alike. Cooperation between the ophthalmologist and the "family doctor" is of the utmost importance in establishing the relation between the eye findings and the general physical condition, and it has been my endeavor to show how greatly the welfare of the patient depends upon the correct interpretation of the ocular findings and an intelligent handling of all features of the case, systemic as well as ocular.

305 Hume Mansur Building.

## THE TUBERCULIN TEST

W. H. MYTINGER, M. D.  
LAFAYETTE

The tuberculin test is a very valuable and too little used diagnostic aid. Its usefulness depends upon the fact that, as a rule, an individual who harbors live tubercle bacilli within his body develops an altered tissue reaction when he again comes in contact with tubercle bacilli or with a protein product formed within the bacilli, to which Robert Koch gave the name of tuberculin.

Koch's tuberculin is obtained by evaporating a three to six-week glycerin bouillon culture of tubercle bacilli to one-tenth of its original volume.

Numerous tuberculins have been prepared from time to time, but until recent years Koch's old tuberculin proved the most useful. In the last few years attempts have successfully been made to obtain a tuberculin of a higher purity as represented by the M. A. 100 and more recently by the P.P.D. or purified protein derivative of tuberculin.

In 1907 Clemens Von Pirquet described his test which consisted in scarifying the arm and placing

a drop of tuberculin on the scarified area. A positive reaction was manifested by an area of redness and swelling about the scarified area two to five days later.

The following year, 1908, the Mantoux test was brought out. This consists of the injection into the skin of dilute aqueous solutions of tuberculin. As used today the test is first done with 0.1 milligram. This is read in from two to five days. If negative, the test is repeated with 1.0 milligram and read as before. Should this reading be negative repeat the test, using 10 milligrams of tuberculin. If this third test proves negative, the individual may be considered non-tuberculous.

The purified tuberculin P.P.D. is used in the same way as the original Mantoux test except that with P.P.D. only two dilutions are used.

In interpreting the reactions care must be exercised that the Von Pirquet reaction is not read according to the Mantoux scale. In a positive Von Pirquet reaction there is an area of redness varying from one-eighth to one inch in width along the line of scarification. About the scarification, within the area of redness there is an elevated area of edema the central part of which may present a purplish hue. Only with extreme rarity does tissue necrosis occur.

In reading an area, from one-eighth to one-quarter of an inch wide is a one plus, one-quarter to one-half inch wide is a two plus, and above one-half inch in width is a three plus reaction. The rare reactions with necrosis are read four plus.

In a positive intracutaneous test edema and redness are shown at the end of forty-eight hours. A one plus reaction is one with slight redness and edema not exceeding 10 m.m.; a two plus reaction is one with edema and redness from 10 to 15 m.m.; a three plus reaction is one with edema and redness more than 15 m.m. (at times the redness may extend along a lymphatic); a four plus reaction in addition to edema and redness shows a central area of necrosis.

In using P.P.D. tuberculin the first dilution contains 0.00002 mg. The dose for the second test is 0.005 mg.

Reactions are read as follows:

A one plus reaction consists of an area of swelling measuring from 5 to 10 m.m. in diameter.

A two plus reaction consists of an area of swelling measuring from 10 to 20 m.m. in diameter.

A three plus reaction consists of an area of swelling exceeding 20 m.m. in diameter.

A four plus reaction consists of an area of swelling and definite necrosis.

The Von Pirquet test is less reliable than the intradermal tests, being probably from five to ten per cent less accurate. It has proved its worth in school survey work. Parents who object to injections rarely refuse the scratch method. The increased number of consents obtained probably more than offsets the greater accuracy of the intradermal tests. Necrosis occurs with extreme rarity and this forestalls quite a bit of parental misunder-

standing after the test is done. The test can be done very rapidly; one operator, with help to sterilize the arm and place the drop of tuberculin on the forearm, can do two hundred tests an hour. In infants, the texture of whose skin does not readily lend itself to intradermal injection, this test is useful.

The technique followed is to cleanse the forearm with alcohol, apply a small drop of tuberculin, scarify through the drop and rub several times with the flat of the needle. The scarification should be superficial, never deep enough to draw blood. By using a syringe with a 27-gauge needle to apply the tuberculin, one c.c. can be made to serve two hundred tests.

In the intradermal test a syringe which will accurately deliver 1/10 c.c. should be used and best with a 27-gauge needle. For this purpose there is a needle which is only a little over 1/4-inch in length which is very convenient.

The intradermal tests are the most reliable and the follow-up with the stronger solution brings out a few more reactors.

In a carefully analyzed survey in Philadelphia where the Mantoux test was employed using three dilutions, no significant lesions were found on x-ray where the stronger solutions had to be employed to bring out the reaction. This leads to the conclusion that for survey work it is safe to use only the 1:10,000 or 1:1,000 dilutions. Both of these dilutions have their advocates. The 1:10,000 is adequate and the percentage of four plus reactors will be less.

For individual work, the intradermal test is undoubtedly superior and the newer preparations of tuberculin are probably more reliable. However, the cost is much greater than the old tuberculin and in survey work this may be a factor. As to the definite advantage over the old tuberculin, reports are conflicting, and this question will have to be left to the future to decide.

The application of the tuberculin test is not decisive of the diagnosis. It demonstrates that the individual has had a primary focus of infection somewhere in his body and that live tubercle bacilli are present. The x-ray should be utilized on all reactors to determine the conditions existing within the chest.

A negative reaction is often of importance in ruling out a suspected tuberculosis as approximately 50% of our adult population and 75 to 90% of school children in Indiana have never experienced a primary infection. A positive reaction points to further study of the case.

As one cannot have tuberculosis of the lungs without a previous first infection, the infected group who show no x-ray findings certainly constitute a group which should receive careful hygienic management for they are the potential cases of secondary disease.

Wm. Ross Sanatorium.

## ABSTRACTS

### THE CANCER PROBLEM TODAY

The cancer problem as WILLIAM CARPENTER MACCARTY, Rochester, Minn. (*Journal A.M.A.*, Sept. 29, 1934), sees it, has five distinct parts, which he enumerates in their probable order of practical importance: 1. The recognition or diagnosis of this disease or complex of diseases by laymen, general physicians, general pathologists, surgical pathologists, surgeons and teachers of medicine. Each has its own limitations. 2. The statistical frequency of the disease and its relation to human welfare and possibly to that of other forms of life. 3. The application of empirical methods of treatment, there being, as yet, no known infallible specific method. 4. The education of active members of the medical profession, medical students and all those who are or might be affected by this disease. 5. Endowment and execution of pure scientific experimental research which has for its function the study of the biologic nature of the disease. Despite the things researchers have not done, their experiments should be continued, increased and even more abundantly endowed; they will undoubtedly discover the true biologic nature of this disease, which is now one of the greatest destroyers of mankind. Cancer is a biologic disease and its living phases, including its initial phase, must be brought to medical students and practicing physicians. Cancer is, in the author's opinion, a simple problem, although the various specific causes may never be known and no specific cure ever found. It is a problem of health in general, external and internal cleanliness and heredity. It is, so far as the profession is concerned, a problem of prevention, which means early recognition and treatment of things which frequently end in cancer. It is a disease that is the result of disease. Now that philanthropists have endowed medical schools, hospitals and research institutions, it is time for some one to endow a system of teaching for general practitioners. This most important member of the profession is the one who sees but does not recognize small cancers. He must have the knowledge brought to him directly by clinics held in his immediate vicinity. Some well trained individual or some group must be endowed to travel and teach without expectation of financial compensation from practice. Should such an endowment arise, the author suggests that it be a memorial to the late Dr. William Henry Welch, who, in his opinion, has done more for human welfare and happiness than any one else in recent civilization. He suggests further that it be applied in the ethical spirit of the American Medical Association, which represents the whole medical profession in its relation to all the people.

### USE OF DILAUDID IN PAIN OF CANCER

C. MALONE STROUD, St. Louis (*Journal A.M.A.*, Nov. 10, 1934), found dilaudid to be an efficient analgesic in the control of constant pain. It is more helpful in cancer than any other opiate that he has used. In order to obtain continuous relief of constant pain, the method of administration is important. The doses should be administered with sufficient frequency to permit continuous effect. Although in the type of case that he observed the detection of habituation was difficult, he believes that dilaudid is less habit forming than morphine. There was less deterioration of character and better morale in patients who were treated with dilaudid than in patients treated with other drugs. The untoward side effects were less troublesome than those of other opiates.



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DECEMBER, 1934

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## EDITORIALS

### 1935 AND MEDICINE

What the coming year holds for us is, of course, a question to those of us who have not that power of discernment attributed to necromancers. Certain it is, however, that many of our problems will be with us for at least another year.

With the coming of the biennial session of the Indiana legislature, with the ever-present spectre of socialized medicine hounding us, it behooves the medical profession to organize as never before. So far as we have been able to learn, there is not one sound reason why every eligible physician in Indiana should not actively identify himself with his local county medical society in 1935. Nor does this mean that this may be done at any time in the year, but that his membership should be a thing of reality not later than February first, and preferably January first.

We need the active support of every reputable physician in Indiana and, properly campaigned, this desirable situation can be brought about. A few days ago the headquarters office received a letter from a physician who has been in practice within our state for more than thirty years; to our certain knowledge, he has been a member of the Indiana State Medical Association for nearly the entire period; he happens to have been a classmate of ours, hence we have known him rather intimately for a considerable period. Well, this man was elected as a delegate to represent his local society at the recent Indianapolis session, and it was quite apparent that he prepared himself for that duty by reading every word of every report as published in *THE JOURNAL*; it also was apparent that he attended both sessions of the House of Delegates and

that he listened attentively to the large grist of business that came before the House. He was deeply impressed, as was evidenced by his letter, for he stated that he had no idea that we were doing so many things and doing them all in a big way. He had not known that Indiana is one of the real leaders in medical organization. Having informed himself, he declared that he was ready and willing to enter into our program and contribute what support he might in the future.

There are hundreds of our members who do not yet know of our definite program, and probably an equal number who are not informed as to the big things we have accomplished these past few years. Their lack of this knowledge is due to the fact that they have not carefully read *THE JOURNAL* and have not been active in their county societies.

We need two big things in the new year of 1935: first, the active support of every reputable physician in Indiana; and, second, the intelligent cooperation of the inactive group already in our membership, and we use the word "intelligent" meaning a cooperation based upon an intimate knowledge of what is going on in Indiana medicine.

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### THE PROPER FUNCTIONS OF THE STATE DIVISION OF PUBLIC HEALTH

A great deal of mischief arises from the fact that perfectly good people striving to do the right thing may utterly misunderstand each other. A common cause of such difference frequently lies in the fact that the proper limits of the function of each are not mutually understood, and so one or the other trespasses or seems to trespass upon the rights and prerogatives of the other. It is extremely important that limits and boundaries be set so that such accidents may happen as rarely as possible. Most of the readers of *THE JOURNAL* are aware of the fact that much progress has been made recently in Indiana in getting a better understanding between the doctors in practice and the health authorities of the State. This has come about largely because those in charge of the Indiana Division of Public Health have seen fit to define their legitimate functions, and are willing and anxious to engage in no other activities. As they understand it, the proper uses of the Division of Public Health are as follows:

1. General supervision of the health officers and public health nurses of the State, and the enforcement of the health laws and rules.
2. The collection and compilation of vital statistics and the keeping of the records.
3. Supervision of environmental sanitation—water, milk, food, sewage, garbage, public health hazards, etc.
4. Supervision and control of factors pertaining to the public health in case of epidemics and catastrophe.

5. Education of the public in matters pertaining to health and disease.

Concerning these duties there will be no disagreement. As a matter of fact that law of the State specifically charges the Division of Public Health with all of these duties except the last. In connection with the education of the public, there will be no trouble, provided the public health authorities stick to general principles and conduct themselves in a manner that is regarded by the medical profession as being ethical and in good taste. It would not be right for the representatives of the Division of Public Health to come into a community and put on a high-powered program in such a way as to lead the community to believe that the neighborhood physicians are out-of-date and generally incompetent. Likewise, it is unethical for programs in health education—definitely a medical subject—to be carried out by laymen, except when the laymen are working directly under medical guidance.

Trouble has arisen when the State Division—a state institution—undertakes to give any sort of medical care (advice, diagnosis, treatment, prognosis) directly to the patient. The Medical Practice Act of Indiana defines the practice of medicine and gives certain qualified persons the right to take part in such practice. It does not give the right to the Division of Public Health. It is for this reason that the Laboratory of the Division of Public Health will do work only through physicians. The layman cannot send in a sample directly, and the layman cannot obtain the report, except through his physician. Some apparent exceptions to this principle may be recalled and need explanations. It is true that the Division through the Pasteur Laboratory does treat persons who have been bitten by a dog. There is, however, a specific law charging them with such a responsibility. Those in charge of the policies of the Division are anxious that this law be repealed at the next legislature and that this work be turned back to the medical profession where it really belongs. When the law was passed it was right that the State do this because the private physician could not give the Pasteur treatment. That condition has now been corrected, however, and the State should go out of the Pasteur treatment business.

One thing needs to be repeatedly called to the attention of the medical profession, and that is that the public has been educated to the point where it demands certain things of either the medical profession or the health authorities, namely, occasional health talks and campaigns in the interest of the health of special groups such as school children, mothers, those suffering from tuberculosis, crippled children, and others. The medical profession must furnish those activities with scientific backing and moral support, or if they do not do so the laymen will take such matters into their own hands and will engage salaried physicians to carry

out these various activities. In such case there are certain to develop misunderstandings, and matters which belong to the medical profession will get out from under medical control. It is going to be necessary for the medical profession as an organized group to keep its fingers on all of these things and to supply leadership. A fine example of such a co-ordinated activity, toward which the medical profession of Indiana can point with pride, is the diphtheria immunization campaign as conducted a year ago. From time to time there will be other such activities required of us as physicians responsible for the public health. Likewise, it will be necessary to continue this immunization work in order that new groups of children may receive the benefit. Unless we do these things in a manner that satisfies the public demand, we may confidently expect that the public will get them done by some other means, which we as a profession will not be able to endorse. It behooves us then to be on the alert, else the highly socialized forms of medical practice will be upon us.

In most instances there is a sharp line between the province of the physician in private practice and the health authorities whether they be local or State. The writer of this editorial is in position to assure the profession that the Division of Public Health has no desire to get into the practice of medicine. It is to be hoped that local health officers will likewise make a sharp distinction between their duties as health officers and as physicians. Instances wherein the health officer has used or misused his office to further his private practice are by no means unknown. It is to be hoped that such delinquencies will be reported to the State Health Authorities and to the officers of the local medical society having control over medical ethics.

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#### THERE'S ART IN ADVERTISING!

Some months ago we wrote an editorial on advertising which was promptly "sidetracked" by headquarters office because of the fact that one of our major committees was even then engaged in a controversy with one of the larger county medical societies over the same subject, and it was deemed advisable to hold the matter in abeyance until the committee and the society in question had arrived at some amicable conclusion.

Advertising by physicians, under various guises, has increased at an amazing rate; our press clipping service literally bombards us with clever examples of the "gentle art" of advertising. Some of these would seem to be most carefully designed and exceedingly well carried out. Of course, when taken to task about the matter, the physician receiving the undue publicity disclaims all knowledge of the matter. He declares that he had no personal contact with the newspaper in question and blames an "enterprising" reporter for the whole affair, not-



withstanding the fact that the article could not have been written without at least a little coaching by a member of our profession. The morning mail of a few days ago brought to our attention some very glaring examples of this sort of thing; one had to do with the invention of an instrument to be used in a certain surgical procedure. The article minutely described the purposes to which the instrument might be put and stated that the inventor was in correspondence with various manufacturers of surgical instruments, with the idea of marketing the contrivance. As is so common in these days, the article was accompanied by a picture of the inventor. While we manage to go over some three or four score journals each month, we do not recall having seen any mention of this invention, even though it is customary for physicians and surgeons to publicize such discoveries through the columns of the professional press. A second clipping was a typical small-town boost for a physician who had recently located in the community. It started out with the announcement that the newcomer would observe certain office hours, and proceeded meticulously to describe the modernity of the office and its equipment, not overlooking the "white-enameled operating room and the polished steel instruments." The little community had just gotten its first resident physician and was all agog over the novelty, and the editor of the little paper waxed eloquent when he said, "Patients who are forced to wait in the reception room—and there seem to be always from one to a half dozen—are not forced to stare miserably at blank walls or amuse (?) themselves with a file of medical journals, as is the case in the average doctor's office . . . and one may look over these treasures while seated at ease in a comfortable, upholstered chair of modern steel construction," etc. So the article goes for almost a column.

We could go on at great length without exhausting the number of instances of flagrant advertising that have been called to our attention. We could comment at length upon the publicity accorded some of our nationally known clinics, and we could cite instances in which men from Chicago and other large cities adjacent to Indiana break into print through our rural Indiana press. Notable in this group is the Chicago man whose name, picture and endorsement of canned milk vs. fresh milk appeared in several Indiana papers. When the attention of the Council of the Chicago Medical Society was directed to this, the gentleman was at once asked to meet the Council and explain just how his picture appeared in so many Indiana papers. We would not have believed his answer had we not been permitted to see his letter in which he stated that he could not appear before the Council on the date set because at that date and hour he was accustomed to attend a clinic at a Chicago hospital and did not care to interrupt that practice! And that was the end of that story, for he was not again asked to give an explanation of his conduct.

During the recent Indianapolis session a little group of physicians was discussing the abuse of advertising when the question of pictures in the lay press came up, and one man called the attention of the group to a picture in a local paper of a group of State Association officials, and he inquired as to whether that would not be termed advertising. It seemed to be the consensus of opinion that such pictures were news stories and should not be considered as in any wise unethical, and we believe that is a correct interpretation. It becomes a horse of a different color, however, when one's picture accompanies an article that is a personal boost, for there really is no necessity for using a picture of a physician along with a tale of his personal prowess.

If and when a majority of the members of a society decide that advertising is the proper course, then it should be done as a group and not as a chiseling process. We know of many instances in which an individual physician, because he is the boon companion of a "star" reporter or because he happens to be a personal friend of the owner of a paper, is everlastingly being publicized. It is not a clever stunt; it but cheapens the individual and reacts unpleasantly upon the whole profession.

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#### SAPPING FROM WITHIN

The Gary *Post-Tribune* for September 26, 1934, carried what purported to be an interview with a local physician regarding his recent visit to Russia. So far as we have been able to discover, this interview has never been denied; hence, it may be accepted as fact. We, of course, take marked exceptions to the statements made therein, particularly to those statements relating to medical practice in the Soviet Union. We quote rather liberally from the interview:

"Enthusiastic about many phases of the Russian 'new deal,' the Gary traveler is especially loud in his praise of that phase of communistic Russia that applies to his own profession of medicine. He said it might be tried profitably in this country.

"In Russia there are no doctors or surgeons in private practice. They all work for the state, at stipulated salaries, and the system has done much to improve the health and physical condition of the Russian people,' Dr. ——— said. 'Physicians everywhere should be taken off the capitalistic basis and made employes of the state, for the prevention and cure of disease is of primary interest to any government that has the welfare of its people at heart,' he continued.

"The American Medical Association, or the American College of Surgeons could supervise the plan here, seeing to it that each physician is paid according to his skill and the amount of work he

does, rather than according to his business-getting ability, as is done at present, Dr. ——— said."

The Indianapolis *Star*, under date of September 29, 1934, comments on the interview in the following vein:

"Dr. ——— of Gary, who has been in Russia, advocates the reorganization of the American medical profession along Soviet lines. He told interviewers in Paris that 'Physicians and surgeons must be taken off the capitalist basis. Disease prevention and cure should be a matter for the state to handle.' He would have the doctors paid by the state. When asked how much they should be paid, he replied: 'As much as they are worth.'"

"It would be an easy thing, he contended, for the American Medical Association and the surgical colleges to look over the lists of physicians and surgeons in a given community and determine how much each should receive. That might be possible, as he suggests, at the outset, but what about young men and women entering the profession? Who could say what they are worth? And how long would it take for them to demonstrate their value to the public?"

"The Gary physician may have been impressed by what he saw in Russia, but must bear in mind that it was in Russia. Our great physicians and surgeons, our leaders in research, were not developed by being lumped into the herd classifications of Sovietism. Our states do look after the prevention and cure of disease, but do not ban private initiative and are not likely to do so, regardless of what may be accomplished in Russia. The American is more than just a political automaton in a Communist state."

The medical profession has enough to do in combating the growing tendencies toward socialism in medicine, without the too numerous instances of our own members (for the physician quoted is a member of his local county medical society) making ill-timed comments from within our own ranks. It is plainly apparent that this physician is not in accord with his fellows in this country; by the same sign, it may be assumed that he has not become perfectly attuned to the manners and customs of his adopted country, the United States.

"Physicians everywhere should be taken off the capitalistic basis and made employes of the state." Shades of our forefathers in medicine, those who paved the way to our present estate—that of being accorded a place in society equalled by no other profession! We might become ironical, satirical, over the matter. Whatever we might say would not be too harsh, but we will be content with the observation that if this man wishes to forego the pleasures and the conveniences of a high degree of individualism in medicine and assume an inconspicuous place in what amounts to more than medical regimentation, we would suggest that he return to his native land, his land of milk and honey. And, we might add, we will bid him godspeed on his way!

## EDITORIAL NOTES

THE list of members of the Indiana State Medical Association as of November 15, 1934, is printed in this issue of *THE JOURNAL*, beginning on page 591. Please look it over, and if you find any errors report them to the headquarters office.

WHEN the action of the House of Delegates of the Indiana State Medical Association in the creation of a section of anesthesia was announced at the Congress of Anesthetists, held in Boston, October 15 to 19, the news was received with great applause and enthusiasm. Many commendatory remarks were made on this action of the Indiana State Medical Association in taking such a step forward leading toward the return of medical practice to those licensed to such practice. Plans and ideas were discussed toward the pursuing of a similar course in other states, California and Indiana having been the leaders in this movement.

WE would again direct attention to a rule long since adopted by the House of Delegates, a rule that has been mentioned at each annual session for several years past, regarding radio broadcasting, news items in the public press, etc. This rule, which has become a part of "Association law," bans the use of names of individual physicians responsible for the broadcasts or news items. As has been pointed out by the Bureau of Publicity, "It is the rule of the Bureau of Publicity, and it has been repeatedly and unanimously approved by the House of Delegates, that this (radio broadcasting) should be presented in an impersonal way, in the name of the medical society to which the member belongs."

AT the bottom of page 540 in the November issue of *THE JOURNAL*, appears a little note that is worth your attention. Lest it be overlooked, we quote: "Perhaps there is a psychological form of scabies which manifests an itching for personal publicity which the Indiana State Medical Association does not approve. The Bureau of Publicity is wholeheartedly in accord with the attitude of the State Association and the present Bureau will continue to maintain what it conceives to be a progressive and highly ethical attitude in its interpretation of the right kind of medical publicity." This comes from that most valuable adjunct of our Association, the Bureau of Publicity. We are in entire accord with the sentiment thus expressed.



WE have repeatedly directed attention to a most pernicious habit that seems to have taken deep root within our profession, that of "talking out of turn" when discussing with a patient a case which has been under the care of another physician. Only recently headquarters had a letter from a down-state member stating that he had been threatened with a malpractice action which seemed to be wholly due to the ill-advised remarks of physicians in another city. The writer stated that his patient told him that she had been advised by these physicians to sue the man who had originally treated the patient. This reprehensible practice is becoming altogether too common and it is high time that steps be taken to disconnect such "chatterers" from all connection with organized and respectable medicine. Rather drastic, yes; but when we are dealing with such folks it seems that only drastic measures will be useful.

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THE election of November sixth seems to have been a veritable Waterloo for the chiropractors and naturopaths of Arizona, California, and Oregon. It seems that these states have the initiative and referendum plan of legislation, so that the aforementioned cultists besought for themselves some special legislation. In Arizona they sought a special licensing board and an exemption from the basic science law. Oregon cultists, already provided with independent boards, wanted to be freed from basic science requirements. But California has a different tale, for there the chiropractors and the naturopaths set their sails high, wide, and handsome, and the sky was their limit. They asked for a monopoly on all forms of physical therapy, the right to practice obstetrics and to practice prophylactic hygiene, sanitation, and diet, this latter to embrace the prescription of herbs and oils and all forms of vegetable and animal food. They demanded the legal right to use all systems, methods, or instruments, including the roentgen rays. As was to be expected, the three states voted in the negative on all of these proposals.

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THE recent breach between the Indiana and Illinois Boards of Medical Registration is in the process of being healed, according to information received from Secretary Davidson. Because of some little peculiarities in the medical laws of the two states, Illinois seemed to have the best of it in the matter of reciprocal relations. An Illinois licensee could register in Indiana, by reciprocity, with little or no formality, while Indiana men going to that state were required to take a clinical examination. Then, too, there was a difference in

the matter of physicians residing on the border of the two states, for the Indiana law provides that in such cases physicians from a neighboring state may answer calls within Indiana without the necessity of registering therein; Illinois, however, has no such provision, and in several instances Indiana men have been embarrassed as a result of going into Illinois on calls. It now seems that the two state boards have gotten together and made arrangements whereby Illinois applicants will be given a clinical examination in the university hospitals. We are pleased to know that the two boards finally are getting together and that the reciprocal relations will be renewed between the sister states.

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THE Directory of the American Medical Association for 1934, issued in August, is the recognized reference on many phases of medical information. It supplies information concerning physicians, institutions, special societies, and much other valuable data. The listings of physicians include 176,687 names, grouped by state, city, and name. Following the name of each physician is given information as to the year of his birth, college, year of graduation, year of license, home and office addresses, office hours, whether or not the physician has a national license, practices a specialty, is affiliated with state or special societies or possesses a military title or professorship. For 7,200 hospitals and sanatoria, the directory gives the location, date established, type of patients treated, capacity, ownership and medical director of each. Names of hospitals approved for internship are given, together with periods of the year given to this training and the entrance requirements; in this list State and Federal institutions are included. More than 200 medical libraries are listed. A listing of medical journals includes the year established, publisher, editor, when issued and subscription rate. Medical colleges are listed, with fairly complete information concerning them. The 1934 Directory shows approximately 60,000 changes of address, 17,000 new names added, and 7,000 names dropped because of death, all since the publication of the last directory in 1931. A copy of the new Directory is in the headquarters office of your Association and the information it contains is at your disposal.

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THE Committee on Economic Security, created by President Roosevelt, in its first bulletin some months ago, said that "the committee is trying to draw up a comprehensive program which will give protection to the individual from all the vicissitudes and hazards of modern life—unemployment, accident, sickness, invalidity, old age, and prema-

ture death." The report of this committee is due to be made to President Roosevelt on December 1 and will not be made public until it is released by the President. Various advisory councils for the Committee on Economic Security have been appointed, and in an editorial\* the *Journal of the A. M. A.* says that Dr. Walter Bierring, President of the A. M. A., Dr. James A. Miller, President of the American College of Physicians, and Dr. Robert B. Greenough, President of the American College of Surgeons, have accepted positions on the Medical Advisory Council, and that a conference of the various advisory bodies would be held in Washington, November 14 and 15, at which conference Dr. Olin West, Secretary of the A. M. A., was invited to attend. The editorial points out that the President will be given the suggestions of the Committee on Economic Security, after the consultants and advisory groups have turned over their reports and plans to the committee. Physicians should be aware of the various phases of the matter. The various bureaus and officers of the A. M. A. are doing their best to make certain that the point of view of organized medicine is adequately presented.

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THE following extract from the *Detroit Medical News* should be of interest to Indiana physicians. It was published under the heading, "Puff Sheets—an Old Racket." We are advised that several of our members have been solicited along these lines:

"Detroit physicians whose names may have been printed in newspapers for presenting papers before scientific groups or because of their association with hospital activities, civic endeavors, or some other legitimate and meritorious work are liable to receive a letter similar to the following:

'Dear Doctor: We have prepared a biographical sketch of your life and activities, which we desire to publish in "The Puffem Up Magazine," which goes to press tomorrow at 4:00 p. m. Will you kindly wire or telephone us your approval of this article.'

"The recipient of this puff is usually flattered. He has never heard of the particular magazine, but the name sounds very impressive, the stationery is embossed, and the editor's name is signed with a flourish. As this is his first experience with puff sheets, the physician may wire approval, or may even squander real money to telephone the 'home office' of the magazine, usually located in New York City. He listens to a poorly prepared article about himself, written about as well as an eighth grade pupil's production; the honeyed words of a supersalesman amplify the wonders of the magazine which 'incidentally' costs but twenty-five cents per copy, 'although it should sell for twice that amount'; the novice in this flim-flam game is

usually talked into subscribing for several hundred copies of the magazine!

"Puff sheets are usually valueless. They generally have no circulation other than the several thousand copies purchased by the suckers whose names appear in a particular issue. The material is 'lousy,' to use the popular word of the vernacular, the typography is messy. The whole scheme is a racket.

"Do not fall for puff sheets. Report the so-called 'magazines' to the Wayne County Medical Society and to the Detroit Better Business Bureau. Save your money."

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PHYSICIANS are proverbially poor business men but we believe that the necessities of the past few years may have taught a few of us to be more careful. Be that as it may, we still get reports of physicians who have signed contracts with this or that collection agency, only to find a short time later that the major portion of the collections are legally held, according to the contract, by the agency, and that the physician has accumulated for himself a group of malice-bearing individuals who will do anything possible to damage his professional reputation. The Bureau of Medical Economics of the American Medical Association urges that physicians everywhere and at all times read every document carefully and understand it thoroughly before accepting or signing it. No longer is it necessary for physicians desiring to use a collection agency to depend upon those which require signatures to a long, complicated contract. Collection agency organizations and associations themselves state that the best agencies do not use a signed contract. Much misunderstanding and later trouble could be avoided if physicians would frankly discuss with their patients the matter of the methods and amounts of payments for services rendered. People have become accustomed to interrogation as to their finances by business firms from which they purchase commodities on deferred payment plans. Physicians who have tried such a plan have expressed surprise over the results of greater frankness with their patients concerning the method of payment of their accounts. In any event, do not sign a contract or a note with any collector's agency, in-state or out-of-state. Many patients change physicians, probably to a much greater extent than is realized, because of the discourteous, threatening and unnecessarily rough manner employed by some companies in collecting medical fees. Before you place accounts for collection, make some investigation; write to your Executive Secretary in the headquarters office, or to the Bureau of Medical Economics of the American Medical Association. They will be glad to give you information if it is available, or to collect such information if it is not at hand.

\* Editorial, *J. A. M. A.*, November 10, 1934, p. 1454.



## THE PRESIDENT'S PAGE

Organized medicine in Indiana approaches the close of 1934 unashamed and unafraid. The year has been hectic; the problems have been many and varied. The physicians in Indiana have had both convictions and courage, and I need to cite briefly only a few of the accomplishments of our association in Indiana in the past year to back up this statement. Our motto, as so well expressed by our executive secretary, has been one of "aggressive activity." Back of all this has been our now well known slogan, "Let nothing interfere with the right of the patient to call the physician of his choice." To accomplish this it has necessarily been a year of "aggressive activity."

Your officers have found it essential to keep in close contact with the officers of our state government, with those in the federal government who have to do with measures that affect the practice of medicine, with the headquarters office of the American Medical Association, and, above all else, with our various county medical societies.

The new set-up in our Indiana Division of Public Health has given to the profession in Indiana a rightful place in health matters in the various communities. The response of the profession has been all and more than we dared to hope for, and there is nothing to be ashamed of in their job, which is being so well done; for instance, the campaign for diphtheria immunization, present plans for a tuberculosis campaign, the campaign for cleaner eating places, our check on laboratory work done by the state laboratory. This does not mention the enormous amount of work done by our physicians individually and without hope of monetary reward, which has been accepted by them as a rightful part of the depression. In all of this work there has been perfect cooperation with the public health council, the state government, the state Division of Public Health, Indiana University, and, again, our county medical societies. Truly, the Indiana plan has not failed; it will not fail, for the principles back of it are right.

There has been constant contact by letter, telegram, and personal visits with the American Medical Association, whose cooperation has been faultless.

No less has been the necessity for our activity in things that pertain to, and emanate from, the federal government. Many of the plans that have come from Washington have affected us directly or indirectly. At the beginning of NRA there was much speculation as to where we stood; and this was needless, for as we knew, and others learned later, our twenty-five-hundred year old code regulates the conduct of our members. We have a code that few business men ever have been able to comprehend, much less apply, and in this mat-

ter we stood on the rock that has so long proved to be our firm foundation.

When CWA appeared on the horizon, it took more than a little effort to convince the powers-that-be that, even though one worked on relief, he still is human and is entitled to his rights, one of which is the right to choose his own physician. Eventually this right was granted to the workers, wherever they were located. The same struggle occurred in PWA, not in our state alone, but in all other states where it was necessary to convince those in authority that medicine is an individual matter with the sick public.

Then came FERA, with the possibility of getting some payment for the treatment of those on relief. No one could have worked harder than our state officers and relief agent, Mr. Book, to see that this money was distributed to the physician individually. There was some friction, as was to be expected, but in most cases it arose between the members of the profession themselves as to the working of the county society scheme. In this matter of organized relief work to the benefit of the medical profession, Indiana very nearly led the whole country. However, forty-one counties in all were able to operate the plan more or less successfully, and as a result the medical men in Indiana received a sum in the neighborhood of \$300,000 from FERA.

These comprise only a few of our activities. As you all know, we have been forced to take our stand against the activities of various societies which seem bent on "chiseling in" on the rights of the physician to treat his patient in his own way. We do not know what is in the future, but we are convinced that the year 1934 will close without the presence of socialized medicine in Indiana.

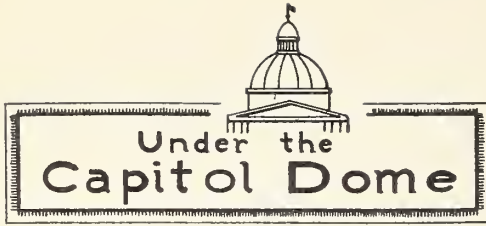
Of the aforementioned accomplishments of Organized Medicine we are not ashamed. Of the future we are unafraid. We do not believe that in America the physician, our best-trained man, will ever be relegated to the position of a hired man for the state. We are just that sure that there still exists in the voting public of America the same red blood that thus far has made us the greatest nation on earth.

When at the end of this year I turn over my duties to my successor, Dr. Leach, you will be led by a man who is not only an ardent advocate, but a shining example of individualism in the practice of medicine. Our interests are safe in his hands.

I want to thank each one of you for the cooperation that you have given me, and ask that you render a like service to my successor.

I shall expect to see you in Gary.

*E. E. Padgett.*



The 1935 General Assembly of Indiana will have four physicians as members, according to a list compiled by Charles Kettleborough, head of the State Legislative Reference Bureau. In the Senate will be Dr. George D. Miller, of Logansport, and Dr. Isaac Trent, of Muncie. Physicians in the House will include Dr. Clarence Stephens, of Plymouth, and Dr. Horace R. Willan, of Martinsville. Robert L. Stanton, of East Chicago, also a member of the House, is a dentist.

\* \* \*

The State Board of Medical Registration and Examination will have its first 1935 meeting on the first Tuesday of January, Miss Ruth V. Kirk, clerk, has announced. Although the agenda for the meeting has not been announced it is understood that some very important matters affecting the Indiana medical world will be discussed.

\* \* \*

Attorney General Philip Lutz, Jr., has just issued an opinion relative to operation of an office for dental practice that might have a counterpart in the medical profession. A well known dentist, together with one not so well known, have opened a joint office in an Indiana city. Names of both appear on the door and in their advertising as well. Actually, according to facts presented to the Attorney General, the better known dentist never practices at the office. The Attorney General ruled that there was no violation of the dental registration act on the part of the dentist who is part owner of the office and does not exercise his right to practice there. "The mere fact that he does not exercise his privilege is not a matter of which the public can complain, in the absence of some evidence of an intent upon his part to defraud the public or of some other criminal act," the Attorney General ruled. This applied so long as the dentist concerned was duly licensed in Indiana.

\* \* \*

The State Highway Commission has started work on marking center lines on more than 8,000 miles of state highways, as a part of its road safety program, according to James D. Adams, commission chairman. The marking includes caution signs at railroad and interurban tracks and similar signs at intersections of heavily traveled roads.

A large number of girls and women are receiving training as nursemaids under the relief program being carried on in Indiana by the State Unemployment Relief Commission. Most of the young girls who are being trained as nursemaids are receiving this training in Marion County and Indianapolis, especially at the County Orphans' Home and at the Flauner House. Three nursemaid training projects also are being carried on at the Riley Hospital, where girls are receiving instructions in diet and laundry work and nurse's aid. Training of all these girls is in charge of Miss Sara Lauter, Marion County director of women's work.

Training of women for positions in the thirty-five nursery schools being established over the state by the Unemployment Relief Commission is being conducted at Purdue University. Some of these women who received training last year in nursery work are now receiving advanced work in the National College of Education in Evanston, Ill., and at the University of Cincinnati. The nursery school project is in charge of Miss Florence Bender, state supervisor of emergency nursery schools.

\* \* \*

Employees in the state automobile license department have been working overtime to prepare for the sale of 1935 licenses. Application blanks for the licenses and for drivers' licenses will go into the mails in December. The new method will simplify the securing of licenses for the Indiana motorists and will result in a considerable saving of time, according to Frank Finney, head of the department.

### DIPHTHERIA REPORT, OCTOBER, 1934

Nineteen deaths from diphtheria in the month of October is a very distinct disappointment, and is further justification of the warning which has frequently been given that the last three months of the year have about as many deaths as all of the rest of the year together. Four different counties reported two deaths each, namely, Delaware, Knox, Lake, and Marion. Six counties entered the list for the first time: Cass, Floyd, Jasper, Monroe, Newton, and Ripley.

As it stands now, at the end of the tenth month of this year, we are fifteen deaths under the total for last year at the same period, and six under the lowest previous figures, those of 1931. We must admit, however, that in view of the intensive immunization campaign of last year, the figures are very disappointing.

An analysis of the number of cases by counties for the month of October, along with the record of the number of cases for the first ten months of the year, follows:



Oct. Total for		Oct. Total for	
County	1934 1934	County	1934 1934
Allen .....	1 7	Lawrence .....	1 6
Bartholomew ...	0 2	Marion .....	2 11
Blackford .....	0 1	Martin .....	0 1
Cass .....	1 1	Monroe .....	1 1
Crawford .....	0 1	Montgomery ...	0 1
Decatur .....	1 2	Newton .....	1 1
Delaware .....	2 3	Perry .....	0 4
Dubois .....	0 2	Randolph .....	1 2
Fayette .....	0 1	Ripley .....	1 1
Floyd .....	1 1	Shelby .....	0 2
Gibson .....	0 1	Spencer .....	0 2
Grant .....	0 2	Rush .....	0 1
Greene .....	0 2	Warrick .....	0 1
Harrison .....	0 1	Vanderburgh ...	0 3
Jackson .....	0 3	Vermillion .....	0 1
Jasper .....	1 1	Wayne .....	1 3
Knox .....	2 4		
Lake .....	2 4	Total .....	19 80

MEDICO-LEGAL DEPARTMENT

By ALBERT STUMP  
ATTORNEY FOR THE INDIANA STATE MEDICAL  
ASSOCIATION

“PERSONS INJURED ON HIGHWAYS”

The following facts of a case were submitted with the suggestion that the facts might be typical of other cases. The doctor then submitted questions which followed this statement of facts. These questions being of the kind that would apparently naturally occur to the doctor involved in the case wherever typical cases might be found, we are presenting all of them together with our answers for the benefit of all the members of the Association.

FACTS IN THE CASE

A doctor is called to the site of an automobile accident on a U. S. and State highway. Information received at the accident disclosed that a car turned over with the driver being the only occupant. The car was badly wrecked and the occupant was lying in a ditch unconscious and hemorrhaging. The doctor gave first aid, and in the meantime officers from the county sheriff's office arrived at the scene and immediately called an ambulance. The doctor sent the patient to a hospital where he later attended the patient further, suturing and dressing the wounds.

After the patient was treated, officers from the sheriff's office came to the hospital and stated that the wrecked car was a stolen car. They thereupon placed the patient under arrest. The patient had then recovered sufficiently to be able to walk, and he was then taken to jail to be held for officers from the town in which the car had been stolen, which was in another State.

When the patient became conscious he stated he did not have any money to pay for professional services to the doctor, nor for the ambulance service, nor for costs at the hospital.

QUESTIONS AND ANSWERS

1. Is the doctor able to collect from the trustee of the township where the accident occurred?

*Answer:* It is the duty of the township trustee under these circumstances to pay for the relief of immediate and pressing suffering. Under Section 12262, Burns 1926, the duty of the trustee as overseer of the poor is stated in these terms:

“Whenever an overseer shall ascertain by investigation that any poor person or family requires assistance, he shall furnish to them such temporary aid as may be necessary for the relief of immediate and pressing suffering; before any further final or permanent relief in any case is given, the overseer shall consider whether distress can be relieved by other means than an expenditure of township funds.”

It has been held under this section that it is the duty of the overseer to give temporary aid to transient persons.

Board v. Harlem, 108 Ind. 164.

As a general proposition the trustee cannot be compelled to pay a physician unless the trustee has employed him, and this employment should be upon individual cases. But where an emergency exists and immediate communication with the trustee cannot be had, and under such circumstances attention is given without the direction of the trustee, the township will be liable for the services of the physician.

Newcomer v. Jefferson Twp., 181 Ind. 1.

After the injured person is removed to the jail then he should be cared for by the county physician, who is employed under Burns 1926, Section 5894, to take care of inmates of county institutions. Under this act county commissioners can employ the same physician who had the case originally, or they may bring in a physician who is regularly under contract with the county for such services.

The physician first on the case could recover from the township trustee only for the emergency services rendered before the patient was taken to jail.

2. Is he able to collect from the county in which it happened?

*Answer:* He is able to collect from the county only for services rendered in the jail, and then only if he is employed by the county commissioners to render the services.

3. Is he able to collect through the sheriff's office because the patient was taken over by him?

*Answer:* No.

4. Is he able to collect from the insurance company in the event of any kind of insurance on the car held by the owner of the car?

*Answer:* No. We do not know of any insurance which would cover this situation for the benefit of the doctor.

5. Would the doctor be able to collect from any fund used by officers from another state who must

(Continued on page 603)

**SECRETARIES' COLUMN***To the Secretaries:*

The Committee on Secretaries conference met on November fifteenth, in Indianapolis. The program for the annual meeting in January has been outlined. Many things are happening nowadays that affect the medical profession and it is absolutely necessary that every secretary in the state attend this meeting.

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The state legislature will convene in January and information has come that sickness insurance legislation may be introduced. If this is true, it may take a lot of hard work to protect the public welfare and not undermine the practice of medicine.

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The problems of unemployment insurance, old age pensions and the corollaries, health insurance, and hospital insurance, are now upon us. At the meeting in January all of these subjects will be discussed and brought up to date for you.

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Presidents of county societies, councilors, and the officers of the state association are especially requested to be present at this meeting, and any doctor in the state who is a member of his county medical society is welcome to attend.

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Did you read the editorial on economics in the November tenth issue of the *Journal of the A.M.A.*? Read it and digest it.

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Since the election is over you know who your legislators are. Get in touch with them immediately. Feel them out. The state Legislative Committee and THE JOURNAL will keep you informed as to what is going on when the legislature meets.

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Best wishes for a Merry Christmas and a Happy and Prosperous New Year!

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I will look for you at the big meeting in January, 1935.

A. M. MITCHELL, M. D.,  
Chairman.

**DEATH NOTICES**

THOMAS W. MOORHEAD, M. D., Terre Haute, died November eighth, aged seventy-eight years. Dr. Moorhead had not been in active practice for several years. He was a member of the staff of St. Anthony's Hospital, once served as president of the Vigo County Medical Society and also of the Aesculapian Society of the Wabash Valley; he was vice-president of the New York Central Railroad Surgeons Association and was an honorary member of the Terre Haute Academy of Medicine. He was a member of the Indiana State Medical Association and the American Medical Association. He graduated from the College of P. and S. of Indiana, Indianapolis, in 1876.

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OLIVER P. MERCER, M. D., Indianapolis, died November eleventh, aged fifty-eight years. Dr. Mercer had been a medical examiner for the Pennsylvania Railroad Company since 1910. He graduated from the Medical College of Indiana, Indianapolis, in 1904.

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ELLIOTT W. KIRK, M. D., Veedersburg, died suddenly, November sixth, aged sixty years. Dr. Kirk was a graduate of the Central College of P. and S., Indianapolis, in 1905. He was a member of the Fountain-Warren County Medical Society, the Indiana State Medical Association, and the American Medical Association.

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WILLIAM PRICE, of Tangier, died October twenty-seventh, aged ninety years. Dr. Price was a Civil War Veteran. He was licensed to practice in Indiana in 1897.

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H. F. MCCOOL, M. D., of Evansville, died October twenty-fifth, aged seventy-one years. Dr. McCool graduated from the Miami Medical College, Cincinnati, in 1887.

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JOHN H. FRENCH, M. D., of Hartford City, died November twelfth, aged forty-four years. Dr. French was widely known as an eye, ear, nose and throat specialist. He graduated from the Toledo Medical College, Toledo, Ohio, in 1913, and was a member of the Delaware-Blackford County Medical Society, the Indiana State Medical Association and the American Medical Association.



## 1934 MEMBERS OF THE INDIANA STATE MEDICAL ASSOCIATION

The following list of members of the Indiana State Medical Association is published primarily for the purpose of detecting errors. It includes the names of those who were members on November 15, 1934. Membership established after that date could not be included in the December JOURNAL.

Members are listed under the counties wherein they reside; in the event that membership is held

in another county a note following the name will give the county in which membership is held.

Names of members who have died during the year do not appear on this list.

The letter (H) following a name indicates that the physician is an honorary member.

If you find any errors in this list, will you kindly report them to THE JOURNAL, 1021 Hume Mansur Building, Indianapolis? Your cooperation will be appreciated.

### ADAMS COUNTY

*Berne*  
Ernest Franz  
Myron Habegger  
D. D. Jones  
H. O. Jones  
Amos Reusser  
*Decatur*  
S. D. Beavers  
Palmer Eichler  
Ben Duke  
F. L. Grandstaff  
G. J. Kohne  
J. M. Miller  
C. C. Rayl  
W. E. Smith

### *Geneva*

C. P. Hinchman  
C. R. Price

### *Monroe*

Geo. S. Silliman  
(member Elkhart Co.)

### *Pleasant Mills*

J. W. Vizard

### *Preble*

J. C. Grandstaff

### ALLEN COUNTY

*Fort Wayne*  
J. R. Adams  
Harry Aldrich  
Paul P. Bailey  
Carl Beierlein  
D. R. Benninghoff  
Raymond Berghoff  
J. E. Bieckel  
H. V. Blosser  
R. M. Bolman  
Theo R. Borders  
G. T. Bowers  
J. W. Bowers  
L. W. Brown  
H. O. Bruggeman  
Doster Bulchner  
E. L. Bulson  
Elizabeth Burns  
D. F. Cameron  
W. W. Carey  
Ernest R. Carlo  
E. L. Cartwright  
M. B. Catlett  
H. R. Chester  
W. R. Clark  
John E. Conley  
Beaumont S. Cornell  
C. R. Dancer  
E. F. DeVaux  
I. W. Ditton  
M. H. Draper  
A. H. Duemling  
W. W. Duemling  
K. C. Eberly  
B. M. Edlavitch  
L. W. Elston  
Ralph W. Elston  
C. H. English (H)  
A. N. Ferguson  
A. M. Fishman  
Milton H. Firestone  
H. W. Foy

H. W. Garton  
H. E. Glock  
L. K. Gould  
A. F. Hall  
Allen Hamilton  
R. L. Hane  
K. C. Hardesty  
Morse Harrod  
L. P. Harshman  
Harry C. Harvey  
A. P. Hattendorf  
Jay F. Havice  
S. P. Hoffmann  
Don D. Johnston  
J. W. Kannel  
O. T. Kidder  
E. A. King  
E. H. Kruse  
W. E. Kruse  
J. C. Lill  
Maurice Lohman  
H. H. Macbeth  
Bertha G. Macbeth  
Harriet Macbeth  
J. E. McArdle  
Wm. O. McBride  
G. W. McCaskey (H)  
G. A. McDowell  
R. B. McKean  
E. N. Mendenhall  
A. L. Mikesell  
Carl G. Miller  
O. J. Miller  
C. F. Moats  
G. E. Moats  
Arthur E. Moravec  
H. L. Murdoch  
Carroll O'Rourke  
C. B. Parker  
M. F. Porter  
Nelson H. Prentiss  
Henry Ranke  
Lyman T. Rawles  
H. A. Ray  
H. W. Rhamey  
W. B. Rice  
N. A. Rokey  
Juan Rodriguez  
M. I. Rosier  
D. L. Rossiter  
C. J. Rothschild  
Harry W. Salon  
N. L. Salon  
D. W. Schafer  
E. M. Schellhouse  
M. F. Schick  
Edward H. Schlegel  
A. L. Schneider  
Herbert Senseny  
Lawrence Shinabery  
John Short  
E. C. Singer  
J. S. Skobba  
Claude E. Skomp  
E. D. Smith  
A. J. Sparks  
John Swanson  
Walter Thornton  
Phillip S. Titus  
E. M. Van Buskirk  
Budd Van Sweringen  
Metodi Volkoff  
J. C. Wallace  
S. G. Welty  
Kathryn Whitten  
Robt. W. Wilkins  
A. C. Worley  
W. C. Wright

A. R. Wyatt (H)

Jas. L. Wyatt

Noah Zehr

### *New Haven*

J. C. Cowan

C. W. Dahling

### *Huntertown*

Katherine Jackson

### *Monroeville*

S. E. Mentzer

### *Woodburn*

Edward Moser

H. E. Steinman

### BARTHOLOMEW COUNTY

### *Columbus*

F. J. Beck  
J. W. Benham  
Bertha A. Clouse  
Walter S. Fisher  
P. C. Graham  
J. K. Hawes  
H. H. Kamman  
A. M. Kirkpatrick  
D. J. Marshall  
Maurice McKain  
H. J. Norton  
Wm. J. Norton  
Lyman Overshiner  
Richard K. Schmitt  
Lotta A. Suverkrup  
Dorothy D. Teal  
Everett W. Williams  
E. U. Wood  
Omer Woodriddle

### *Elizabethtown*

O. A. DeLong  
C. M. Jackson

### *Hartsville*

Marvin E. Hawes

### *Hope*

R. A. Hoover  
L. D. Reed

### BENTON COUNTY

### *Ambia*

W. H. Taylor

### *Boswell*

C. W. Atkinson  
O. M. Flack  
H. H. Hubbard

### *Earl Park*

C. T. Bundy  
Thomas Keefe

### *Fowler*

W. H. Altier  
D. E. Mavity  
Verne L. Turley

### *Otterbein*

J. E. McCabe

### *Oxford*

H. G. Bloem  
Myron S. King  
E. E. Parker  
Virgil Scheurich

### BOONE COUNTY

### *Lebanon*

Robert S. Ball  
H. A. Beck  
John D. Coons  
O. C. Higgins  
C. G. Kern  
John R. Porter  
E. A. Rainey  
Wm. H. Spieth  
Wm. H. Williams

### *Zionsville*

L. S. Bailey

E. D. Johns

### *Jamestown*

Francis Riley  
(member Montgomery Co.)  
Alvin Schaaf  
(member Montgomery Co.)

### *Thorntown*

Clancy Bassett

### *Whitestown*

R. J. Harvey

### CARROLL COUNTY

### *Bringinghurst*

Emerson Carter

### *Burlington*

J. R. McLaughlin

### *Burrows*

E. D. Wagoner

### *Camden*

Chas. Kennedy  
Eva Kennedy

### *Deer Creek*

A. G. Moore

### *Delphi*

G. D. Beamer  
C. E. Carney  
C. C. Clauser  
Ione Clayton  
C. C. Crampton  
Hubert Gros  
W. R. Quick  
J. J. Shultz

### *Flora*

E. H. Brubaker  
Andrew J. Cook  
T. A. Kearns  
T. D. Peters  
Morris Thomas

### *Rockfield*

H. Y. Mullin

### CASS COUNTY

### *Logansport*

A. J. Anderson  
C. A. Ballard  
W. E. Barnett  
J. H. Barnfield  
J. C. Bradford  
Thomas Cooper  
John Davis  
B. W. Egan  
Clara S. Eirley  
J. L. Gilbert  
E. L. Hedde  
C. C. Hickman  
W. R. Hickman  
Marian Hochhalter  
W. A. Holloway  
W. W. Holmes  
J. A. Little  
J. B. Maxwell  
C. H. McCully  
M. A. McDowell  
(member Miami Co.)  
G. D. Miller  
Earl Palmer  
J. H. Reed  
Joseph Rubsam  
Foss Schenk  
H. G. Steinmetz  
J. W. Stewart  
M. B. Stewart  
F. W. Terflinger  
C. L. Viney  
C. L. Williams  
Paul D. Williams  
(member Tippecanoe Co.)  
P. H. Wilson

### *Galveston*

C. T. Dutches

### *New Waverly*

A. E. Graves

### *Royal Center*

D. R. Ivey

Walter McBeth

### *Twelve Mile*

Donald L. Miller

### *Walton*

E. P. Flanagan

E. A. Spohn

### CLARK COUNTY

### *Charlestown*

T. J. Marshall

### *Clarksville*

T. M. Smith

### *Henryville*

S. B. Elrod

### *Jeffersonville*

J. H. Baldwin  
Ralph Bruner  
E. P. Buckley  
Austin Funk  
C. F. C. Hancock  
Nathaniel C. Isler  
H. H. Reeder  
W. M. Varble

### *Memphis*

J. M. Reynolds

### *Sellersburg*

Samuel S. Foss

A. C. Vandever

### *New Washington*

R. S. Taggart

### CLAY COUNTY

### *Brazil*

Fred C. Dille  
L. S. Hirt  
J. F. Maurer  
Fredk. Nussel(H)  
H. M. Pell  
John C. Shattuck  
C. C. Sourwine  
T. M. Weaver

### *Carbon*

James Van Sandt

### *Clay City*

Walter Bond

L. C. Rentschler

### *Coalmont*

H. H. Ward

### *Staunton*

P. H. Veach

### CLINTON COUNTY

### *Boyleston*

F. N. Thorpe

### *Frankfort*

F. A. Beardsley  
M. F. Boulden  
C. A. Burroughs  
A. G. Chittick  
C. B. Compton  
T. A. Dykhuizen  
Alexander Hamilton  
R. A. Hedgecock  
J. M. Johnson  
C. A. Robison  
Hollace R. Royster  
S. B. Sims  
J. A. Van Kirk  
B. A. Work

### *Kirklin*

W. C. Mount

### *Mulberry*

Nelson B. Combs

J. A. Kent

### *Rossville*

John S. Ketcham

### *Sedalia*

Ivan E. Carlyle

### CRAWFORD COUNTY

### *Miltovn*

J. J. Johnson

### DAVIES-MARTIN COUNTY

### *Burns City*

T. A. Hays

### *Elnora*

Mac Guyer Porter

### *Loogootee*

Wm. Gilkinson

J. F. Michaels

J. W. Strange

### *Montgomery*

Douglas Hart

### *Odon*

I. E. Bowman

Jerome DeMotte

### *Plainville*

D. H. Swan

### *Shoals*

G. M. Freeman

E. E. Long

### *Washington*

N. Maude Arthur

B. O. Burress

C. P. Fox

R. L. Kleindorfer

H. B. Lindsay

Wm. O. McKittick

S. L. McPherson

A. A. Rang

E. B. Smoot

H. C. Wadsworth

### DEARBORN-OHIO COUNTY

### *Aurora*

Wm. F. Duncan

J. M. Jackson

C. W. Oleott

O. H. Stewart

James F. Treon

E. R. Wallace

### *Dillsboro*

Frank Downey

### *Guilford*

John C. Elliott

### *Lawrenceburg*

A. T. Fagaly

Wm. J. Fagaly

Edwin L. Libbert

G. F. Smith

### *Rising Sun*

Geo. H. Hansell

B. N. Searcy

### DECATUR COUNTY

### *Adams*

M. A. Tremain

### *Greensburg*

P. C. Bente

W. C. Callaghan

H. S. McKee

C. C. Morrison

Charles Overpeck  
E. T. Riley  
I. M. Sanders  
W. E. Thomas  
D. W. Weaver  
B. S. White (H)

*Letts*

D. D. Dickson

*Millhouses*

J. W. Herr

*Westport*

Chas. Wood

**DEKALB COUNTY***Auburn*

H. M. Covell  
L. N. Geisinger  
A. V. Hines  
D. M. Hines  
Harold Nugen  
J. A. Sanders  
Bonnell M. Souder  
C. S. Stewart  
Willard W. Swarts

*Bulter*

C. B. Hathaway  
W. F. Shumaker  
Chas. Weirich

*Garrett*

J. A. Clevenger  
M. E. Klingler  
M. O. Klingler  
D. M. Reynolds  
W. G. Symon  
J. W. Thomson

*Waterloo*

E. A. Ish  
J. E. Showalter  
J. P. Showalter

**DELAWARE-  
BLACKFORD  
COUNTY***Albany*

E. H. Hall  
K. E. Puterbaugh

*Daleville*

J. R. Hurley  
O. A. Tucker

*Eaton*

G. F. Ames  
J. M. Atkinson  
O. A. Hall  
(member Parke-  
Vernilion Co.)  
T. J. Mansfield

*Gaston*

Fred Langton

*Hortford City*

W. W. Ayres  
H. L. Buckles  
Geo. H. Dando  
O. A. Sellers  
L. E. Werry

*Montpelier*

T. J. McKean  
(member Wells Co.)  
F. M. Reynolds  
(member Wells Co.)  
J. A. Taylor

*Muncie*

Clay A. Ball  
Roscoe Becson  
H. E. Bibler  
C. L. Boek  
C. L. Botkin  
J. H. Bowles  
K. T. Brown  
E. H. Clauser  
J. H. Clevenger  
R. E. Cole  
H. A. Cowing  
Elmer T. Cure  
E. C. Davis  
O. M. Deardorff  
J. Frank Downing  
F. W. Dunn  
H. D. Fair  
F. E. Hill  
H. E. Hill  
A. T. Kemper

F. E. Kirshman  
Jules La Duron  
C. A. Leatherman  
L. R. Mason  
C. E. Miller  
W. J. Molloy  
F. T. Moore  
Paul D. Moore  
George Moore  
W. C. Moore  
Thos. R. Owens  
A. C. Rettig  
S. G. Silverburg  
J. C. Silvers  
J. M. Silvers  
O. E. Spurgeon  
W. A. Spurgeon  
C. J. Stover  
E. F. Tindal  
I. N. Trent  
L. O. Walters  
J. H. Williams

*Selma*

C. A. Jump

*Yorktown*

C. H. Wright

**DUBOIS COUNTY***Ferdinand*

H. G. Backer  
A. F. Gugsell

*Huntingburg*

W. D. Bretz  
L. C. Lukemeyer  
H. C. Knapp  
S. L. McKinney  
E. F. Steinkamp  
Harvey Stork

*Ireland*

L. B. Johnson

*Josper*

P. J. Blessinger  
St. John Lukemeyer  
Leo A. Sali  
C. O. Schoier

**ELKHART COUNTY***Bristol*

S. S. Frybarger

*Elkhart*

S. O. Barwick  
G. E. Bowdoin  
R. A. Bowman  
Fred N. Dewey  
L. A. Elliott  
C. F. Fleming  
J. C. Fleming  
J. M. Fleming  
G. W. Grossmickle  
C. W. Hayward  
Eugene Holdeman  
A. W. Hull  
M. W. Hunn  
A. W. Kistner  
John W. Kistner  
E. G. Koehler  
Benj. F. Kuhn  
Fred A. Lanpman  
W. C. Landis  
Milo O. Lundt  
I. J. Markel  
H. N. McKee  
S. T. Miller  
Allen A. Norris  
G. B. Patrick  
H. C. Schlosser  
M. Maywood Sears  
I. Wright Short  
W. A. Stauffer  
Hannah O. Staufft  
R. B. Stout  
L. F. Swank  
L. F. Swihart  
D. D. Todd  
K. W. Vetter  
S. C. Wagner  
O. E. Wilson  
Jas. A. Work

*New Albany*

J. H. Ashabranner  
J. W. Baxter  
J. W. Baxter, Jr.  
S. M. Baxter  
J. E. Bird  
C. E. Briscoe  
D. F. Davis  
Parvin Davis  
Geo. H. Day  
E. P. Easley (H)  
W. F. Edwards  
C. C. Funk  
W. H. Garner  
John P. Gentile  
W. A. Hall  
R. W. Harris  
A. P. Hauss  
W. J. Leach  
Chas. P. Leuthart  
Anna McKamy  
Wm. Moore  
P. R. Pierson  
A. N. Robertson  
(member Washing-  
ton Co.)  
S. T. Rogers  
Carl P. Schoen  
P. H. Schoen  
H. B. Shacklett  
W. L. Starr  
F. T. Tyler  
Harry Voyles  
Amzi Weaver  
Wm. W. Weaver  
W. C. Winstandley  
M. F. Wolfe  
John T. Wray

*Goshen*

E. E. Ash  
H. P. Bowser  
Henry W. Eby  
F. M. Freeman  
C. A. Inks  
H. K. Lemon

L. H. Simmons  
James A. Snapp  
H. E. Vanderbogat  
Albert C. Yoder  
Ralph H. Young

*Middlebury*

M. A. Farver  
Melvin Teters

*Nappanee*

Henry Defrees  
R. A. Fleetwood  
M. D. Price  
W. A. Price  
J. S. Slahaugh  
L. M. Slahaugh

*New Paris*

E. D. Stuckman

*Wakarusa*

Chas. L. Amick  
F. I. Eicher

**FAYETTE-  
FRANKLIN COUNTY***Brookville*

E. M. Glaser  
Ralph Sappenfield  
H. N. Smith

*Connersville*

L. N. Ashworth  
Irvin E. Booher  
J. H. Clark  
R. H. Elliott  
Stanley Gordin  
Stanton E. Gordin  
Albert F. Gregg  
J. S. Leffel  
H. C. Metcalf  
R. D. Morrow  
H. W. Smelser  
F. J. Spilman

*Everton*

O. E. Dale

*Laurel*

S. A. Gifford

*Oldenburg*

George Ohery

*Orange*

W. R. Phillips

*Rochester*

Archibald Brown

*Golena*

E. L. Sigmon

*Georgetown*

H. K. Engleman

*New Albany*

J. H. Ashabranner

*Fort Branch*

B. C. Gwaltney

*Houboldt*

A. F. Marchand

*Linton*

Frank A. Bailey

*Hazleton*

H. M. Arthur

*Oakland City*

C. M. Clark

*Owensville*

G. B. Beresford

*Potoko*

M. L. Arthur

*Princeton*

H. H. Alexander

*Amaz*

W. L. Starr

*Amzi Weaver*

Wm. W. Weaver

*W. C. Winstandley*

M. F. Wolfe

*John T. Wray***FOUNTAIN-  
WARREN COUNTY***Attica*

J. R. Burlington  
J. C. Freed  
A. C. Holley  
A. R. Kerr

*Covington*

J. W. Aldridge  
Earl E. Johnson  
Simeon Lamhright  
Alva Spinning

*Hillsboro*

E. G. Bounell

*Kingman*

A. L. Ratcliff  
B. J. Smith

*Pine Village*

Geo. W. Dewey  
(member Tippe-  
canoe Co.)

*Veedsburg*

C. B. McCord

*Wallace*

Huhert M. Rusk

*West Lebanon*

W. W. Heald

*Williamsport*

S. S. DeLaney  
G. S. Porter  
T. E. Ward  
(member Tippe-  
canoe Co.)

**FULTON COUNTY***Akron*

W. E. Hosman

*Grasscreek*

J. E. Saunders

*Fulton*

F. C. Dielman

*Kewanee*

H. D. Tripp

*Rochester*

Archibald Brown

*M. O. King*

M. E. Leckrone

*H. W. Markley*

Mark M. Piper

*Dean K. Stinson*

Dean K. Stinson

**GIBSON COUNTY***Fort Branch*

B. C. Gwaltney

*Houboldt*

A. F. Marchand

*Linton*

Frank A. Bailey

*Hazleton*

H. M. Arthur

*Oakland City*

C. M. Clark

*Owensville*

G. B. Beresford

*Potoko*

M. L. Arthur

*Princeton*

H. H. Alexander

*Amaz*

W. L. Starr

*Amzi Weaver*

Wm. W. Weaver

*W. C. Winstandley*

M. F. Wolfe

*John T. Wray*

M. F. Wolfe

*John T. Wray*

M. F. Wolfe

*John T. Wray*

M. F. Wolfe

**GRANT COUNTY***Fairmount*

Z. T. Hawkins  
Glenn Henley  
L. D. Holliday

*Gas City*

L. H. Conley (H)  
Fred Tavenner

*Jonesboro*

J. C. Knight  
J. A. Ritchey

*Marion*

W. T. Bailey  
R. F. Braunlin  
W. H. Braunlin

*McD. Brown*

A. D. Burge  
V. V. Cameron  
B. C. Dale  
E. O. Daniels  
G. R. Daniels  
A. T. Davis  
M. S. Davis  
G. G. Eckhart  
L. H. Fshleman  
W. A. Fankhoner  
Pierre J. Fisher  
H. R. Goldthwaite  
E. O. Harrold  
A. D. Huff  
Frances Johnson  
E. F. Jones  
R. W. Lavengood  
M. J. Lewis  
Harold E. List  
J. F. Loomis  
Eleanor Mellwain  
Robert McIlwain  
J. D. McKay  
H. A. Miller  
C. J. Overman  
Nettie B. Powell  
G. G. Richardson  
E. M. Troom  
J. C. Vaughan  
Samuel Weinberg

*Stevarts*

Stevarts

*Fortville*

Jas. B. Ellingwood  
J. E. Ferrell  
S. W. Hervey  
C. E. McCord  
Stewart Slocum

*Greenfield*

J. L. Allen  
Ralph N. Arnold  
C. H. Bruener  
C. M. Gibbs  
Oscar Heller  
R. E. Kinneman  
L. B. Rariden  
J. R. Woods

*New Palestine*

W. H. Larrabee  
E. E. Mace

*Wilkinson*

E. R. Gibbs  
Charles Titus

*Savoy*

P. C. King  
Wm. S. Resoner

*Upland*

E. C. Taylor

*Von Buren*

M. L. Bridge  
J. E. Derbyshire

**GREENE COUNTY***Bloomfield*

King L. Hull  
Mathias S. Mount  
H. B. Turner  
F. A. VanSandt

*Johnsonville*

Carl M. Porter  
Sam Rotman

*Linton*

Frank A. Bailey  
P. C. Berns  
W. F. Craft  
C. C. Hamilton  
Geo. C. Porter  
B. B. Rainey

*Lyons*

J. S. Simons

*Worthington*

J. W. Clifford  
George E. Moses

*Cortesville*

W. J. Fuson

*Clayton*

Rilus E. Jones

*Donville*

L. W. Armstrong  
Thos. R. Barker  
Mount E. Frantz  
J. H. Grimes  
W. T. Lawson  
C. B. Parker

*North Solem*

E. Ray Royer

*North Solem*

E. Ray Royer

*North Solem*

E. Ray Royer

*Noblesville*

W. E. Catterson  
J. E. Hanna  
R. F. Harris  
Sam W. Hooke  
H. C. Kraft  
O. B. Pettijohn  
Ray W. Shaiks  
J. D. Sturdevant

*Sheridan*

I. W. Davenport  
J. W. Griffith  
A. C. Newby  
J. L. Reck  
E. M. Young

*Westfield*

A. F. Connoy  
Z. H. Fodrea (H)

**HANCOCK COUNTY***Charlottesville*

W. R. Johnston

*Fortville*

Jas. B. Ellingwood  
J. E. Ferrell  
S. W. Hervey  
C. E. McCord  
Stewart Slocum

*Greenfield*

J. L. Allen  
Ralph N. Arnold  
C. H. Bruener  
C. M. Gibbs  
Oscar Heller  
R. E. Kinneman  
L. B. Rariden  
J. R. Woods

*New Palestine*

W. H. Larrabee  
E. E. Mace

*Wilkinson*

E. R. Gibbs  
Charles Titus

*Savoy*

P. C. King  
Wm. S. Resoner

*Upland*

E. C. Taylor

*Von Buren*

M. L. Bridge  
J. E. Derbyshire

*Lyons*

J. S. Simons

*Worthington*

J. W. Clifford  
George E. Moses

*Cortesville*

W. J. Fuson



**HUNTINGTON COUNTY**

*Bippus*  
Joy F. Buckner  
(member Marion Co.)

R. V. Carpenter

*Huntington*

D. D. Bowers  
H. S. Brubaker  
S. M. Casey  
A. C. Chenoweth  
Myers B. Deems  
M. G. Erehart  
J. B. Eviston  
F. W. Grayston  
W. S. Grayston  
J. M. Hicks  
R. G. Johnston  
Robert Meiser  
F. B. Mitman  
Grover Nie  
G. G. Wimmer

*Markle*

A. H. Northrup  
Walter H. Vance

*Roanoke*

O. P. Bigelow

*Warren*

Claude S. Black  
L. W. Smith

**JACKSON COUNTY***Brownstown*

Chas. L. Ackerman  
C. H. Rueh

*Cortland*

J. M. Jenkins

*Crothersville*

Wm. K. Adair  
P. A. Kendall

*Ewing*

D. J. Cummings

*Freestown*

T. E. Conner

*Medora*

Neal Matlock

*Seymour*

C. E. Gillespie  
Harold P. Graessle  
G. H. Kamman  
Guy Martin  
Louis H. Osterman  
D. L. Perrin  
E. E. Schriefer  
J. M. Shields  
E. D. Wright

**JASPER-NEWTON COUNTY**

*Goodland*  
C. C. Bassett  
Frank Kennedy  
J. G. Kinneman

*Kentland*

O. E. Glick  
W. C. Mathews  
G. H. VanKirk

*Morocco*

G. D. Larrison  
L. H. Recher

*Remington*

A. P. Rainier

*Rensselaer*

M. D. Gwin  
A. R. Kresler

**JAY COUNTY***Dunkirk*

E. C. Garber  
Don P. Murray

*Pennville*

H. J. Hiestand

*Portland*

A. C. Badders  
George Cring  
Forrest Keeling  
Florence Lyons  
Mark M. Moran  
J. E. Nixon  
G. L. Perry  
W. D. Schwartz  
B. M. Taylor

*Redkey*

John Lansford

*Salamonia*

J. J. Kidder

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W. L. Grossman  
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D. L. McLaughlin  
W. H. Stemm  
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*Scipio*

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*Sandborn*

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N. E. Beckes  
C. L. Boyd  
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M. L. Curtner  
E. T. Edwards  
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V. A. Funk  
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*LaPorte*

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R. B. Jones  
J. N. Kelly  
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## HOOSIER NOTES

EAST CHICAGO was selected as the place of meeting for the Tenth District Society in 1935.

DR. M. H. DRAPER, of Fort Wayne, has been made president of the Mississippi Valley Tuberculosis Conference.

DR. J. R. TRACY, of Anderson, spoke on "The History of the X-Ray" before the fourth district meeting of the Business and Professional Woman's Club, held in Anderson, November eleventh.

DELPHI was chosen as the place for the spring meeting of the Eleventh Councilor District Medical Society, at the recent meeting held in Logansport.

THE southeastern branch of the American Urological Association will be held at the Hotel Biltmore, Atlanta, Georgia, December 7th and 8th, 1934.

DR. GEORGE A. MAY, Madison, was the principal speaker at the October thirty-first meeting of the Madison Rotary Club. His subject was, "History of Medicine."

MISS ELEANOR ZIMMERMAN, of Baltimore, and Dr. Edmund L. Keeney, son of Dr. and Mrs. B. G. Keeney, of Shelbyville, were married in Baltimore, October twenty-seventh.

DR. C. F. ADAMS, former director of the laboratory of the Indiana State Board of Health, is pathologist and bacteriologist of the Missouri State Board of Health.

DR. EDWIN N. KIME, Indianapolis, addressed the Kentucky State Radiographers' Association in Louisville, October twenty-second; his subject was "Radiosensitivity and Gradation of Malignancy."

DR. MATTHEW WINTERS of Indianapolis was the speaker for the November fifth meeting of the Vigo County Medical Society Auxiliary which met in Terre Haute. The meeting was open to the public.

DR. H. G. HAMER, Indianapolis, has been elected president of the medical advisory board of the Indianapolis Methodist Hospital. Dr. Ross C. Ottinger was made vice-president, and Dr. J. H. Eberwein, secretary.

MEMBERS of the senior class of the Indiana University School of Medicine were guests of Sisters of Charity at a dinner meeting, November eighth, in the nurses' home of St. Vincent's Hospital, Indianapolis.

DR. NORMAN SILVERMAN, who has been in Indianapolis for several years, has opened an office for general practice at Riley, Indiana, and will also be associated with Dr. J. R. Yung, in Terre Haute.

DRS. J. M. AND C. F. KERCHEVAL have leased the Rarick Clinic at Wolcottville. Dr. Simon J. Young, who has had charge of the clinic for the past two years, has moved to Kendallville where he will continue his practice.

DR. AND MRS. R. L. COMPTON, of Osgood, will go to Chicago, January first, where Dr. Compton will, for a year, work as a member of the resident staff of the Children's Memorial Hospital. Dr. Compton will complete a year's work at the St. Louis Children's Hospital in December.

THREE American physicians, Dr. George Minot, Dr. William P. Murphy and Dr. George H. Whipple, will divide the Nobel prize in medicine for 1934, as an award for their work in pernicious anemia. Dr. Minot was one of the guest speakers at the Indianapolis session of the Indiana State Medical Association this year.

DR. ELIHU P. EASLEY, of New Albany, observed his eighty-seventh birthday, October twenty-second. Dr. Easley has practiced medicine in New Albany for a period of sixty-two years, a record of continuous service which is most unusual. Dr. Easley is one of the oldest practicing physicians in Indiana. He is an honorary member of the Indiana State Medical Association.

DR. GOETHE LINK, Indianapolis, presided over the fifty-fourth annual reunion of the alumnae association of the Central College of Physicians and Surgeons, held in Indianapolis, November eighth. The program included a business meeting, a social time, and a banquet in the evening, at which Dr. H. H. Wheeler, Indianapolis, was toastmaster. Approximately seventy-five members attended the meeting.

TWENTY-THREE new record forms designed for tuberculosis sanatoria, to keep uniform and complete records of all material facts about their patients, have resulted after two years' work done by a committee of the American Sanatorium Association, assisted by members of the staff of the National Tuberculosis Association. The forms are obtainable from the Livingston Press, Livingston, N. Y.

THE Indianapolis Methodist Hospital has received a copy of Dr. Franklin Martin's "Fifty Years of Medicine and Surgery" from the author, as an addition to its library. Late editions of Dr. Charles P. Emerson's "Clinical Diagnosis," "Medical Diagnosis," and "Essentials of Medicine" also have been presented to the library by the author. Dr. A. M. Mendenhall, of Indianapolis, has given to the library several new editions of books covering the subject of gynecology.

APPLICATION blanks are now available for space in the scientific exhibit at the Atlantic City session of the American Medical Association, June 10-14, 1935. The Committee on Scientific Exhibit requires that all applicants fill out the regular application form and requests that this be done as early as convenient. Applications close February 25, 1935. Persons desiring application blanks should address a request to the Director, Scientific Exhibit, American Medical Association, 535 North Dearborn Street, Chicago, Illinois.

THE American Association for the Study of Goiter again is offering the Van Meter prize award of \$300 for the best essay on the subject of goiter. Essays are to be based on original research work on the subject of goiter, preferably its basic cause. The prize essay or its abridgement is to be presented at the annual meeting of the Association in Salt Lake City, Utah, in June, 1935. Competing manuscripts should be in the hands of the corresponding secretary, W. Blair Mosser, not later than April 1, 1935. First prize in 1934 was awarded to M. A. B. Brazier, of London, England, for her essay, "The Impedance Angle Test for Thyrotoxicosis."

AT AN informal meeting of the Indiana Anesthetists, held November second, at Terre Haute, the following section officers were elected for the year 1935 for the new Section in Anesthesia: chairman, F. T. Romberger, Lafayette; vice-chairman, C. N. Combs, Terre Haute; and secretary, Lillian B. Mueller, Indianapolis. Anesthetists throughout the state who are members of the Indiana State Medical Association are requested and urged to get in touch with either the secretary

or the chairman, so that a complete roster of those interested in full-time or part-time anesthesia may be obtained. Suggestions for and offers of pertinent papers for section meetings will be welcome.

ONE man has been sentenced to a year in a federal penitentiary and two others are awaiting trial on a charge of conspiring to violate the Federal Food and Drugs Act by advertising and selling "Warm Springs Crystal Compound" as coming from the springs by that name in Georgia. In reality, the "crystals" are a simple laxative, composed of Glauber's salts. They cost only a few cents per pound, and were sold for a dollar per pound under the name of "Warm Springs Crystal Compound." In the beginning, the Warm Springs Foundation disavowed any connection with the company other than that the office was set up in the same town. When the "crystals" began to move into interstate commerce, quantities of the compound were seized because of misbranding, and members of the company were arrested.

THE United States Public Health Service publishes a monthly brochure known as "Venereal Disease Information," which is primarily an abstract journal containing summaries of articles which appear in 350 of the medical journals of the world. The two diseases considered, syphilis and gonorrhea, are among the most prevalent of all communicable diseases, and it is essential that health authorities have the active assistance and support of all physicians in efforts to control these diseases. We have been requested to bring to the attention of our members the fact that the publication "Venereal Disease Information" is easily readable and sufficiently brief so that the physician in private practice will find time to read it. The subscription price is fifty cents per year, payable by check, money order, or cash (no stamps), and may be ordered through the Superintendent of Documents, Government Printing Office, Washington, D. C. The Public Health Service department also issues two pamphlets pertaining to sex education for adolescent children, one entitled "Healthy, Happy Womanhood" and the other "Keeping Fit" which may be purchased from the same source at a cost of five cents for each pamphlet, or in quantities of 100 for \$3.75.

#### SEVENTH DISTRICT MEDICAL SOCIETY

The Seventh District Medical Society will meet in Martinsville, Thursday, December thirteenth. The program will begin at two o'clock in the afternoon and will include the president's address, by Walter L. Portteus, Franklin, and four symposia, one on headache, one on dyspepsia, one on backache, and the last on chest pain. Each symposium will have four discussants. Headache will be consid-



ered as being caused by conditions of (a) the eye, (b) ear, nose and throat, (c) neurological, and (d) general.

The symposium on dyspepsia will be considered from the standpoint of (a) neurological conditions, (b) gastroenterological conditions, (c) cardiac conditions, (d) pediatrics.

The symposium on backache will be discussed as caused by (a) orthopedic, (b) genito-urinary, (c) gynecological, and (d) general conditions.

The symposium on chest pain will be discussed as caused by (a) tuberculosis, (b) heart disease, (c) general conditions; and (d) x-ray of the chest will be discussed.

Dinner for physicians and their wives will be served at seven o'clock. The evening speaker will be a layman who will have a topic of medical interest for his subject.

IN addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

- Bilhuber-Knoll Corporation
- Dilaudid Rectal Suppositories 1/24 grain
- Grisard Laboratories
- Scillonin
- Tablets Scillonin, 0.5 mg.
- Solution Scillonin
- Mallinckrodt Chemical Works
- Phenobarbital Sodium
- Parke, Davis & Co.
- Diphtheria Toxoid, Alum Precipitated (Refined)—P. D. & Co.
- E. R. Squibb & Sons
- Sterile Ampules Procaine Hydrochloride—Squibb (Crystals) for Spinal Anesthesia, 50 mg.
- Sterile Ampules Procaine Hydrochloride—Squibb (Crystals) for Spinal Anesthesia, 100 mg.
- Sterile Ampules Procaine Hydrochloride—Squibb (Crystals) for Spinal Anesthesia, 120 mg.
- Sterile Ampules Procaine Hydrochloride—Squibb (Crystals) for Spinal Anesthesia, 150 mg.
- Sterile Ampules Procaine Hydrochloride—Squibb (Crystals) for Spinal Anesthesia, 200 mg.
- Supplee—Wills-Jones Milk Co.
- Supplee B. Acidophilus Milk.

SOCIETIES AND INSTITUTIONS

SOCIETY REPORTS

ADAMS COUNTY MEDICAL SOCIETY met at the Adams County Hospital, Decatur, October twelfth. Dr. E. M. Van Buskirk of Fort Wayne talked on "Cancer," and Dr. Cooney, of Fort Wayne, talked on "Bladder Tumors." Dr. Van Buskirk's talk was illustrated with x-ray pictures.

DAVISS-MARTIN COUNTY MEDICAL SOCIETY members met October twenty-third at Washington. Dr. E. N. Kime of Indianapolis presented a paper on "The Prevention and Control of Cancer."

DEARBORN-OHIO COUNTY MEDICAL SOCIETY members met at the King Hotel in Lawrenceburg, October fourth. Dr. Gerald

Kempf of Indianapolis was the principal speaker. A second meeting was held October twenty-fifth, in Aurora, when Dr. E. L. Libbert of Lawrenceburg presented his report as a delegate to the annual meeting of the Indiana State Medical Association.

DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY met at the Hotel Roberts, Muncie, November twentieth, to hear Dr. O. M. Deardorff, of Muncie, discuss the new Constitution and By-laws of the society. Dr. J. H. Clevenger, of Muncie, gave a report of the annual convocation of the American College of Surgeons. Dr. E. T. Cure, of Muncie, reported the Interstate Post-graduate Medical Assembly held in Philadelphia. Others members of the society who attended were discussants.

FAYETTE-FRANKLIN COUNTY MEDICAL SOCIETY members met at Connorsville, November thirteenth. Dr. F. M. Gastineau, Indianapolis, presented a paper on "Common Skin Diseases." Attendance numbered thirteen.

FLOYD COUNTY MEDICAL SOCIETY met in New Albany, October twelfth, to hear Dr. Harry Weeter, Louisville, discuss "Laboratory Proceedings," pointing out the importance of laboratory tests in diagnosing various diseases. On November ninth, the regular monthly meeting was held at New Albany, with Dr. R. W. Harris, Louisville, as the principal speaker, his subject being "The Human Cell: What It Is and What Becomes of It."

FORT WAYNE MEDICAL SOCIETY met November sixth, to hear Dr. Frederick A. Coller, of Ann Arbor, talk on "Mortality Factors in Acute Appendicitis." The society held a dinner meeting at the Chamber of Commerce, Fort Wayne, November twentieth. Dr. G. W. McCoy, director of the National Institute of Health, Washington, D. C., was the guest speaker. His subject dealt with amebic dysentery.

FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY met at West Lebanon, November first, with Dr. E. W. Kirk, of Veedsburg, as the speaker. His subject was "External Diseases of the Eye." Sixteen members were present.

GIBSON COUNTY MEDICAL SOCIETY members met at Princeton, November twelfth, to hear Dr. W. W. Hewins, of Evansville, discuss "Prostatic Hypertrophy and Treatment." Twenty members were present. Officers were elected for 1935 as follows: President, Dr. K. S. Strickland; vice-president, Dr. C M.. Clark; secretary-treasurer, Dr. O. M. Graves; secretary of hospital staff, Dr. V. McCarty; censors, Dr. H. G. Petitjean, H. H. Alexander, and G. B. Beresford.

GREENE COUNTY MEDICAL SOCIETY held a meeting at Linton, October eighteenth. Speakers included Dr. E. E. Padgett, Indianapolis, whose subject was "Surgical Diseases of the Gall Bladder and Bowel Ducts"; Dr. Paul K. Cullen, of Indianapolis, who talked on "Medical Diseases of the Liver and Gall Bladder," and Dr. Verne K. Harvey, of Indianapolis, who discussed the state diphtheria immunization program.

GRANT COUNTY MEDICAL SOCIETY and the Grant County Dental Society held a joint meeting at the Hotel Spencer in Marion, October twenty-third, with more than one hundred in attendance. Dr. Joseph E. Schaefer, of Chicago, presented an illustrated lecture on "Mouth Infections and Mouth Lesions."

HAMILTON COUNTY MEDICAL SOCIETY members were guests of Drs. J. L. Hicks, Frank Rodenbeck and E. V. Shockney, of Arcadia, October sixteenth. The principal speaker was Dr. J. H. Warvel, of Indianapolis. On November thirteenth, twenty attendants heard Dr. G. W. Gustafson, of Indianapolis, discuss "Polyneuritis Gravidarum and Breech Extraction." Films showing the DeLee technic in breech extraction were shown.

HANCOCK COUNTY MEDICAL SOCIETY held its regular dinner meeting at the Columbia Hotel, Greenfield, November nine-

teenth. The meeting was in charge of the Greenfield dentists. Dr. Edgar T. Haines, of Indianapolis, discussed "Practical Aids in the Prevention of Mal-Occlusion."

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HENRICKS COUNTY MEDICAL SOCIETY met at Danville, October twenty-sixth, to hear Dr. C. H. McCaskey, of Indianapolis, talk on "Esophageal Spasm." The paper was illustrated with slides.

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HENRY COUNTY MEDICAL SOCIETY members were addressed by Dr. C. A. Stayton, of Indianapolis, and Dr. W. S. Robertson, of Spiceland. Dr. Stayton's subject was "Cancer in Indiana," and Dr. Robertson talked about "Burns and Their Treatment." Attendance numbered eighteen. The meeting was held at Newcastle, October eighteenth.

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INDIANAPOLIS MEDICAL SOCIETY members met October twenty-third, at the Athenaeum, when the program consisted of a symposium on rheumatic fever. Speakers were Drs. Russell Hippensteel, George Bond, and H. C. Thornton, all of Indianapolis. On October thirtieth, Dr. R. W. Scott, of Cleveland, Ohio, presented a clinic in the Indianapolis City Hospital auditorium in the afternoon, and in the evening presented a paper on "Modern Aspects of the Problem of Vascular Disease." The November sixth meeting was devoted to a symposium on urology, with Drs. Roy L. Smith, Paul Beard, James F. Balch, W. P. Morton, and H. O. Mertz as speakers. On November thirteenth, a symposium on undulant fever was presented by Dr. L. P. Doyle, of Purdue University, and Dr. John A. MacDonald, of Indianapolis, with Dr. Verne K. Harvey as first discussant.

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JASPER-NEWTON COUNTY MEDICAL SOCIETY met October twenty-fifth at the Jasper County Hospital, with Dr. A. P. Rainier, of Remington, as host. Dr. E. M. Amos, of Indianapolis, was the principal speaker, and was in charge of a tuberculosis clinic preceding the meeting.

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JAY COUNTY MEDICAL SOCIETY members met at Portland, November second, to hear Dr. J. H. Stygall, of Indianapolis, discuss "When to be Suspicious of Tuberculosis."

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KNOX COUNTY MEDICAL SOCIETY held its regular monthly meeting, October eighteenth, in Vincennes. Dr. August F. Knoefel, Terre Haute, presented a paper on "Osteomyelitis" and Dr. Frank Sayers, Terre Haute, talked about the value of vitamins and calcium in bone diseases.

On November thirteenth, in Vincennes, members of the Knox County Medical Society heard papers on "Ionization Treatment of Hay Fever" and "Acute Rheumatic Fever," presented by Drs. D. H. Richard and L. L. Gilmore. Attendance numbered fifteen.

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LAKE COUNTY MEDICAL SOCIETY held its November meeting at St. Margaret's Hospital, Hammond, November eighth. Dr. Aaron Arkin, Chicago, was the guest speaker, his subject being "Carcinoma of the Lung." Nomination of officers for 1935 was the principal business of the meeting; election will take place at the December meeting.

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LAPORTE COUNTY MEDICAL SOCIETY met at LaPorte, November fifteenth, for a dinner meeting. Dr. H. F. Thurston, Indianapolis, was the principal speaker, and his subject was "Surgery of the Blood Vessels." Twenty-three members were present. A motion picture sound film was presented by the Petrolagar Laboratories.

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MONROE COUNTY MEDICAL SOCIETY met at Bloomington, October seventeenth, with Dr. Max Bahr, Indianapolis, as the principal speaker. His subject was "The Parkinsonian Syndrome Due to Chronic Epidemic Encephalitis."

MUNCIE ACADEMY OF MEDICINE members heard Dr. Morris Fishbein, editor of the *Journal of the A. M. A.*, November sixth, at a dinner meeting in the Hotel Roberts, Muncie. Dr. Fishbein spoke on "The Socialization of Medicine." The Muncie Academy and the Eighth District Medical Society united in conducting an all-day meeting.

Dr. Max A. Bahr, of Indianapolis, talked on "Mental Mechanism of the Mind Deranged" at the November thirteenth meeting of the Academy.

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PORTER COUNTY MEDICAL SOCIETY met at the Lembke Hotel, Valparaiso, October thirtieth. Dr. C. V. McCormick, Gary, spoke on "Focal Infection." Attendance numbered twenty-four.

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POSEY COUNTY MEDICAL SOCIETY members met at the Tavern Inn, New Harmony, November eighth, to hear Dr. Harold D. Lynch, Evansville, discuss "Fundamentals of Infant Feeding." No meeting was held in October, because of the conflict in meeting dates with the annual session of the Indiana State Medical Association. Seven of the fourteen members of the society attended the State Association meeting.

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RANDOLPH COUNTY MEDICAL SOCIETY met November twelfth at Union City. Dr. Frank Walker, of Indianapolis, talked on "Gynecological Aphorisms."

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RIPLEY COUNTY MEDICAL SOCIETY members and Auxiliary members were entertained by the Batesville physicians and their wives, October seventeenth. Dr. John C. Bigham, Batesville, presented a paper.

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ST. JOSEPH COUNTY MEDICAL SOCIETY members held their first fall meeting in the University Club, South Bend, October second, with forty-nine members and eleven guests present. Dr. M. W. Lyon read a paper on "The History and Etiology of Cancers."

On October sixteenth, the St. Joseph County Society met in the University Club, with forty-nine members and eight guests present. It was decided that future meetings will be held in the Oliver Hotel. The principal address was presented by Dr. A. S. Giordano, South Bend, whose subject was "The Role of the Pathologist in the Cancer Problem."

The October twenty-third meeting of this society was held in the Turkish Room of the Oliver Hotel. Dr. F. R. Clapp, South Bend, presented a paper on "Cancer of the Female Reproductive Organs." Forty-six members and twelve guests were present.

At the October thirtieth meeting, with forty-three members and ten guests in attendance, Dr. G. F. Green, South Bend, moved and it was seconded that the president of the society appoint a committee to investigate and consider the necessity for a cancer clinic, and later motions gave the committee power to take care of all publicity concerning the matter. Dr. L. A. Sandoz, South Bend, presented a paper on "Skin Cancer."

The November sixth meeting of the St. Joseph County Medical Society was held in the Oliver Hotel, with forty-five members and one guest present. Dr. George F. Green, South Bend, presented the fifth paper of the cancer symposium, his subject being "Cancer of the Breast." Members of the cancer committee were appointed as follows: Dr. G. F. Green, chairman; Dr. P. J. Birmingham, and Dr. R. L. Sensenich.

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SHELBY COUNTY MEDICAL SOCIETY members met in Shelbyville, November seventh, to hear Dr. E. F. Kiser, of Indianapolis, talk on "Heart Conditions."

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TIPPECANOE COUNTY MEDICAL SOCIETY members met at Lincoln Lodge, November eighth, with Dr. Matthew Winters, of Indianapolis, as the principal speaker. His subject was "Nutritional Diseases and Infant Feeding." Attendance numbered forty.



WABASH COUNTY MEDICAL SOCIETY members met November seventh at the Wabash County Hospital. Dr. B. S. Cornell, of Fort Wayne, presented the principal address.

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WAYNE-UNION COUNTY MEDICAL SOCIETY members met at the Richmond-Leland Hotel, Richmond, November twenty-second. Dr. John H. Skavlem, Cincinnati, Ohio, presented a paper on "Diagnosis of Chronic Chest Diseases."

#### INDIANA STATE MEDICAL ASSOCIATION

MEETING OF THE COMMITTEE ON CHILD WELFARE,  
INDIANAPOLIS, INDIANA, TUESDAY,  
OCTOBER 9, 1934

Meeting called to order by Dr. O. N. Torian, Indianapolis, Indiana, chairman, at 2:00 p.m.

*Roll call* showed the following present: O. N. Torian, M. D., Indianapolis; Thurman B. Rice, M. D., Indianapolis; Irvin C. Barclay, M. D., Evansville; Harold D. Lynch, M. D., Evansville; Robert G. Harkness, M. D., Terre Haute; Milo K. Miller, M. D., South Bend; Homer Woolery, M. D., Bloomington; John H. Green, M. D., North Vernon; Harry P. Ross, M. D., Richmond; Louis Segar, M. D., Indianapolis; H. W. Gante, M. D., Anderson; John S. Morrison, M. D., Lafayette; O. B. Nesbit, M. D., Gary; Ada E. Schweitzer, M. D., Indianapolis; Matthew Winters, M. D., Indianapolis.

#### *Purpose of Meeting*

To discuss matters of general interest to doctors interested in child welfare projects; to especially review the diphtheria immunization campaign in the various communities which were conducted during the winter of 1933-1934; to present plans for similar campaigns during the coming year.

#### *Campaigns in Various Communities*

Dr. Irvin C. Barclay, of Evansville, read a paper explaining the method adopted by Vanderburgh County for conducting the diphtheria immunization campaign during the previous year. Briefly he explained that the local doctors immunized those children who were not able to pay, free of charge, the material being furnished by the State of Indiana. A nominal fee was charged all those who were able to pay. The children came to the clinics for treatments.

Dr. John H. Green of North Vernon explained the plan used in Jennings County, which was the same plan adopted by other small counties in the southern section of the state. The children who were able to pay took their money to school, then the doctors were assigned certain schools to work, and the money collected was put in a jack-pot and divided evenly afterwards. They had splendid cooperation from the county nurses; the township trustees each gave \$25.00, which also was put in the general collection. Jennings County having only 15,000 people, was a satisfactory community to deal with this way.

Dr. Matthew Winters of Indianapolis, who was Chairman of the Marion County Immunization Campaign, then related the experiences of that community. Treatment was administered in the doctor's office; those who were able to pay were charged a nominal fee; indigent children were treated without charge, the material used being furnished free of charge by the state. Publicity was handled through the newspapers, over the radios, etc. Also the PWA furnished people who went from house to house urging the parents to have their children immunized. To date plans had not been made for conducting such a campaign during the coming year.

Dr. Milo K. Miller of South Bend discussed the immunization campaign conducted in his locality. The pediatricians took the lead in the campaign, agreed to immunize the indigent children without charge, and made an attempt to have the County Medical Society set a flat rate of perhaps \$1.00 for those who were able to pay. This met with disfavor, so the doctors charged as they saw fit. He suggested that he believed that the campaign should be followed up by the Shick test.

#### *The Question of a Campaign Against Tuberculosis*

Dr. Harold Lynch of Evansville, read a paper which had been prepared by three local doctors regarding a tuberculosis campaign. Dr. Rice of Indianapolis made the first discussion. He said that he thought that the Mantoux test was a fine means of locating this disease in its earliest form, and stressed early diagnosis as one of the most important steps for controlling tuberculosis. It was generally agreed that the x-ray was the best means of testing for the presence of tuberculosis, but of course, this is quite expensive. It was also agreed that any steps taken in this direction should be handled by the medical profession, and not by lay organizations. At the time of the meeting the matter of a state-wide tuberculosis campaign had not been brought before the House of Delegates of the Indiana State Medical Association, so no action could be taken until after they had passed on it.

#### *Discussion of Campaign Against Communicable Diseases*

Dr. Louis Segar of Indianapolis stated that he thought that efforts of the medical profession to conduct these various campaigns was very commendable, but said that if a campaign were started one year, it would be imperative that the profession continue to conduct them, or else educate the public to operate on their own initiative. The first situation would, of course, not result in a remunerative practice for the profession, and the second phase is far in the offing. Several other doctors present expressed their ideas in this matter, and agreed with Dr. Segar.

#### *The Division of Public Health and the Medical Profession*

Dr. Rice, Assistant Director of the Indiana Division of Public Health, stated that the Division of Public Health was more than anxious to be of every possible assistance to the profession; he stated that this organization was putting forth every effort to cooperate with the medical profession; it is their desire to let the medical profession start each and every project of this nature, and then the state department would act *only* if called upon. He agreed with Dr. Segar that the campaigns must be perennial if they are successful. Whether or not the Division of Public Health would be able to furnish material for immunization campaigns during the coming year would not be determined at the time of this meeting. Dr. Rice expressed that he was very adverse to making it a policy for the Division of Public Health to furnish material all of the time, as this verges on socialized medicine, and he said that if it were coming around to socialized medicine, the Division of Public Health did not want to have any hand in it. He also said that the school authorities and school physicians were doing more than anyone else in the field to educate the public to the idea of expecting something for nothing. He said that he personally did not approve of such a step, and further said that the first function of the Division of Public Health was to keep vital statistics; second, to control sanitation measures; and, to take charge of epidemics *after* the epidemic is established. Any other functions should be made *only* at the request of the medical profession.

#### *The Teaching of Pediatrics*

Dr. Torian explained how last year at the request of local medical societies, someone from Indianapolis who was well informed along these lines, went to the meetings of the medical societies and lectured on pediatrics, after which there would be an open discussion. Much good and benefit was derived, and interest worked up in this phase of medicine. It is their plan to continue these programs during the coming year. If any medical society, or groups of county medical societies, should desire a guest speaker, plans should be made by writing to Dr. Louis Segar of Indianapolis. Dr. Miller stated that last year, about once a month at the regular meetings of the St. Joseph County Medical Society, the meeting was wholly concerning the question of pediatrics. Much good was accomplished, but Dr. Miller said he believed that if an outside speaker would come in, he could do much better. Dr. Barclay expressed that he was much in favor of such a program, and stated he knew Evansville would be very enthusiastic and would welcome speakers for this purpose.

There being no further business, the meeting adjourned, to meet again upon the call of the chairman.

## BUREAU OF PUBLICITY

October 5, 1934.

Present: William N. Wishard, M.D., chairman; E. D. Clark, M.D.; J. H. Stygall, M.D.; and T. A. Hendricks, executive secretary.

A schedule for publicity on the eighty-fifth annual session of the Indiana State Medical Association at Indianapolis, October 9, 10 and 11, 1934, was approved by the Bureau.

## Radio releases:

Saturday, September 15—"So-called Cancer Cures."

Saturday, September 22—"Encephalitis in Indiana."

Saturday, September 29—"High Blood Pressure."

Saturday, October 6—"Competitive Athletics."

## Report on medical meeting:

September 13—Lake County Medical Society, Gary, Indiana, "Present-Day View of the Treatment of Cancer;" "Cardio-Vascular Diseases in Relation to Our Activities;" and "Medical Organization in Indiana."

## Request for speaker:

November 5, 2:30 P. M.—Woman's Auxiliary to the Vigo County Medical Society, Terre Haute. Speaker obtained.

Letter received from the assistant director of the Indiana Division of Public Health in regard to encephalitis.

The following resolution in regard to a tuberculosis campaign was approved by the Bureau of Publicity to be presented to the House of Delegates:

"As the Advisory Health Council of the State of Indiana has approved a tuberculosis campaign to be presented to the Indiana State Medical Association for its consideration; therefore, be it

"Resolved, That a tuberculosis campaign for the State of Indiana be approved by the House of Delegates, to be conducted through cooperation with the district and county medical societies and the State Division of Public Health, and the Advisory Health Council of the same, and through physicians in the state who are particularly interested in tuberculosis problems."

Letter received from an Indianapolis physician in regard to a medical museum at the Indiana University School of Medicine. The Bureau felt that a note in regard to this should be carried in *THE JOURNAL*.

Copy of the Indiana Parent-Teacher bulletin for October, containing an article by the assistant director of the State Division of Public Health, brought to the attention of the Bureau. The Bureau heartily approved the article.

## FOURTH DISTRICT MEDICAL SOCIETY

The Fourth District Medical Society held a postgraduate course on pediatrics at Muscatatuck State Park Inn, near North Vernon, Wednesday, November fourteenth.

Attendance at the meeting numbered fifty-one.

The following program was carried out:

10:00 a. m., Clinic, by Louis H. Segar, M. D.

11:00 a. m., Tuberculosis, by L. T. Meiks, M. D.

1:00 p. m., Rheumatic Syndromes, by Russell Hippenstall, M. D.

1:30 p. m., Respiratory Diseases, by H. B. Mettel, M. D.

2:00 p. m., Anemias of Infancy, by O. N. Torian, M. D.

2:30 p. m., Nutritional Diseases, by Matthew Winters, M. D.

3:00 p. m., Contagious Disease, by Walter Stoeffler, M. D.

3:30 p. m., Pediatric Procedures, by H. F. Call, M. D.

4:00 p. m., Diseases of the New Born, by B. K. Rust, M. D.

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## EIGHTH DISTRICT MEDICAL SOCIETY

Members of the Eighth District Medical Society and members of the Auxiliary were entertained in Muncie, November sixth.

Dr. James G. Carr, Chicago, held a clinic at the Ball Memorial Hospital in the afternoon, and presented an introductory address on "Acute Diseases of the Heart."

In conjunction with the Muncie Academy of Medicine, a dinner meeting was arranged at the Hotel Roberts, following which Dr. Morris Fishbein, of Chicago, editor of *The Journal of the American Medical Association*, presented an address on "The Socialization of Medicine."

A reception and tea was given for the Eighth District Auxiliary members in the Marie Bingham Hall of Ball Memorial Hospital in the afternoon.

Approximately two hundred physicians and their wives attended the meeting, according to newspaper reports.

Members of the Madison County Medical Society will act as hosts for the district meeting at Anderson in 1935. Officers were elected as follows:

Dr. Roscoe H. Beeson, Muncie, president; Dr. V. G. McDonald, Anderson, secretary.

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## TENTH DISTRICT MEDICAL SOCIETY

The fall meeting of the Tenth District Medical Society was held in the Venetian Room of the Hotel Gary, at Gary, on Wednesday, October twenty-fourth.

The meeting was divided into an afternoon and evening session, with dinner served at 6:30 in the evening.

Following the call to order and a greeting from the Lake County Medical Society, presented by Dr. J. A. Teegarden, the meeting was turned over to the officers of the Tenth District with Dr. T. W. Oberlin, Hammond, presiding.

A motion picture, "Vaginal Hysterectomy for Uterine Prolapse," was shown through the courtesy of the Petrolagar Laboratories.

Dr. C. R. G. Forrester and Dr. Horace Stimson, of Chicago, presented an illustrated lecture on "Reduction of Fractures Under Local Anesthesia with Ambulatory Treatment." Motion pictures, slides and instruments were used to illustrate. Discussion was opened by Dr. C. C. Robinson, Indiana Harbor.

Dr. Austin A. Hayden, of Chicago (secretary of the Board of Trustees of the American Medical Association), presented a paper on "What the Socialization of Medicine Means to the General Practitioner." Discussed by Dr. Christopher Daniels, London, England, and Dr. R. L. Sensenich, South Bend.

Dr. Russell L. Cecil, New York, talked on "Pneumonia." Discussion was opened by Dr. George M. Cook, Hammond.

Dr. Robert Sonnenschein, Chicago, discussed "Practical Points of Otolaryngology for General Practitioners." Discussed by Dr. H. C. Parker, Gary.

Following the dinner at 6:30, Count Ernesto Russo, of Milan, Italy, a member of the Italian Legation at Washington, D. C., and special representative of Premier Mussolini, talked on "America as I Find It."

During the intermission and before the dinner, members were the guests of the Calumet Medical Society at a round table gathering designed to put them in the proper frame of mind for the enjoyment of the evening program. The guest speaker for the evening, Count Ernesto Russo, gave a very able presentation of his subject and the surprise which greeted his exposure certified to the success of his deception.

Among the highlights of the meeting might be mentioned the able presentation of the topic on the socialization of medicine by Dr. Hayden, and the discussion which followed, with particular reference to the English panel system by Dr. Christopher Daniels. Our president-elect, Dr. Sensenich, honored us with his presence and also discussed this topic.

Dr. Russell L. Cecil gave a masterly discussion of his subject, and Dr. Sonnenschein's presentation brought out many practical points of value for the general practitioners. Dr. Forrester's moving pictures illustrating the ambulatory treat-



ment of fractures proved to be very interesting and valuable. The film supplied by the Petrolagar Laboratories supplied a very clear and illustrative picture of vaginal hysterectomy. The Tenth District members feel that they have made a mark for any or all of the other districts to shoot at. The meeting was exceedingly well attended, with 137 present, interest was keen, and the fact that practically all of the members stayed throughout the entire program vouches for the fact that the subjects were timely, profitable, and entertaining.

East Chicago was selected as the place of meeting in the spring, and the following officers were elected:

President, Dr. C. C. Robinson, Indiana Harbor; vice-president, Dr. Milton Given, East Chicago; secretary, Dr. George F. Bicknell, East Chicago.

Respectfully submitted,  
N. K. FORSTER, *Secretary*.

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ELEVENTH DISTRICT MEDICAL SOCIETY

Approximately one hundred forty physicians and their wives attended the fifty-second semi-annual meeting of the Eleventh District Medical Society, at Logansport, October twenty-fourth.

Morning and afternoon sessions were held at the Logansport State Hospital, where the staff conducted a clinic on mental and nervous diseases, in the morning; in the afternoon, Dr. F. G. Ebaugh, of Denver, Colorado, and Dr. L. H. Gilman, Indianapolis, were the principal speakers. A banquet was served in the evening, and was followed by an entertainment presented by the Logansport Shrine Club Minstrels.

Women guests were entertained by a committee of physicians' wives from Logansport.

Delphi was selected as the place for the 1935 spring meeting for the Eleventh District.

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THIRTEENTH DISTRICT MEDICAL SOCIETY

The annual meeting of the Thirteenth District Medical Society was held at Michigan City, Wednesday, November seventh.

The morning program was held at the Indiana State Prison where the prison physician, Dr. Weeks, read a paper on "Medical Practice in a State Prison." The prison orchestra presented a concert, and following this the physicians were taken on a tour through the institution.

Luncheon was served by the Sisters and nurses of St. Vincent's Hospital.

In the afternoon papers were presented by Dr. K. T. Knode, South Bend, on "Recent Advances in Pediatrics ; Dr. George S. Bond, Indianapolis, on "Heart Disease in Children;" Dr. H. G. Hamer, Indianapolis, on "Problem of the Prostate and the Limits of Resection;" and a case presentation by Dr. F. V. Martin, of Michigan City.

A banquet was served at 6:30 at the Spaulding Hotel, following which Dr. E. E. Padgett, president of the Indiana State Medical Association, talked on "Medical Organization from an Economic Standpoint" and Dr. R. L. Sensenich, South Bend, president-elect of the State Association, discussed "Present Status of Health Insurance and State Medicine."

Officers for 1935 were elected as follows:

President, Dr. L. A. Wilson, Michigan City; vice-president, M. M. Piper, Rochester; secretary-treasurer, J. M. Fleming, Elkhart; councilor, W. B. Christophel, Mishawaka.

Respectfully submitted,  
J. M. FLEMING, M. D., *Secretary*.

INDIANA DIVISION OF PUBLIC HEALTH  
BUREAU OF COMMUNICABLE DISEASES

Monthly Report, October, 1934  
Thurman B. Rice, M. D.

Diseases	Oct. 1934	Sept. 1934	Aug. 1934	Oct. 1933	Oct. 1932
Tuberculosis .....	154	108	120	168	208
Chickenpox .....	134	19	5	178	306
Measles .....	188	71	33	28	41
Scarlet Fever .....	428	234	69	549	471
Smallpox .....	4	3	5	3	3
Typhoid Fever .....	43	98	112	53	96
Whooping Cough .....	181	134	130	62	64
Diphtheria .....	256	119	41	335	404
Influenza .....	78	69	51	163	122
Pneumonia .....	14	12	3	12	17
Mumps .....	1	3	3	3	47
Poliomyelitis .....	7	28	6	4	7
Meningitis .....	3	4	3	8	27
Encephalitis .....	9	77	2	4	1
Trachoma .....	0	3	0	0	5
Amoebic Dysentery .....	9	0	0	0	0
Tetanus .....	2	0	0	0	0

BOOK REVIEWS

BOOKS RECEIVED

DEFINITE DIAGNOSIS IN GENERAL PRACTICE. By W. L. Kitchens, M. D., with a Foreword by John H. Musser, B. S., M. D., F. A. C. P., Professor of Medicine in The Tulane University of Louisiana School of Medicine. Large octavo of 1,000 pages. Philadelphia and London: W. B. Saunders Company, 1934. Cloth, \$10.00 net.

\* \* \*

GYNECOLOGY. By Brooke M. Anspach, M. D., professor of gynecology, Jefferson Medical College. Fifth edition, reillustrated, reset, and completely revised by the author, with the assistance of Philip F. Williams, M. D., and Lewis C. Sheffey, M. D. 832 pages with 679 illustrations, 10 in color. Cloth. Price \$9.00. J. B. Lippincott Company, Philadelphia, London and Montreal. 1934.

\* \* \*

MINOR SURGERY IN GENERAL PRACTICE. By W. Travis Gibb, M. D., consulting surgeon, City Hospital and Central and Neurological Hospitals, New York. 429 pages with 148 illustrations. Cloth. Price \$5.00. Paul B. Hoeber, Inc., New York, 1934.

\* \* \*

BOOKS REVIEWED

DEFINITE DIAGNOSIS IN GENERAL PRACTICE. By W. L. Kitchens, M. D., with a foreword by John H. Musser, Jr., M. D., Professor of Medicine, Tulane University Medical School, New Orleans, La. 1,000 pages. Cloth. Price, \$10. W. B. Saunders Co., Philadelphia, 1934.

W. B. Saunders Company has just published a book on diagnosis which is so different in all its makeup from anything preceding it, that it will require further study to make a complete review. Its use, as intended by the author and publishers, is threefold: First, as a quick reference; second, as a differential diagnosis; third, as "eliminative" or "selective" diagnosis. The book is in two parts, and if it is desired to review quickly the symptomatology of any given disease, those symptoms are found in part two. If, however, a given symptom is to be studied to learn those diseases in which that symptom may be present, the reader turns to part one and can find the disease quickly. The arrangement of the book is

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unique in that each symptom and each disease is given a separate page which is supposed to simplify the finding and classification. Further study of the book will be reported at a later date but at present one can be assured that Dr. Kitchens has brought out something entirely new in the way of diagnosis, and the publishers have brought out an equally new style of book-making.

## MEDICO-LEGAL DEPARTMENT

(Continued from page 589)

have some special moneys or fund used for extra-dition purposes?

Answer: No.

6. Would the situation be the same if there had been more than one person in the wrecked car?

Answer: Yes.

## FURTHER COMMENTS ON THIS SITUATION

While the law, in our opinion, is as we have stated it in answer to the questions above, we realize that there would be considerable difficulty in collecting from the township trustee if the trustee were to take an unfavorable attitude. Conditions similar to those outlined in the Statement of Facts are presented to physicians every day in Indiana. Frequently these services are never paid for. There has been so much difficulty in regard to them under existing laws that we are preparing a suggestion to the Executive Committee for its consideration, to help overcome this difficulty. A further article will be prepared for THE JOURNAL upon this point as soon as we have it more fully worked out.

## ABSTRACTS

CLINICAL CIRCULATORY EFFECTS OF  
DINITROPHENOL

A. B. STOCKTON and W. C. CUTTING, San Francisco (*Journal A.M.A.*, Sept. 22, 1934), investigated the effects of dinitrophenol on the circulation in thirteen patients with apparently normal cardiovascular systems. Six of the group were placed at bed rest in the hospital, and control observations of blood pressure, pulse rate, vital capacity and venous pressure were made regularly at 8 a.m., 2 p.m., and 7 p.m. The control period was continued until at least three consecutive results were in close agreement. A quantity of 300 mg. of sodium dinitrophenol was administered orally in three divided doses each day, and the circulation and vital capacity were observed for from four to twelve days. The ambulatory patients were treated in a similar manner, except that the same functions were observed once daily at 4 p.m. Before the observations were made, the patient was required to rest in a prone position without pillows for one hour. Vital capacity and systolic and diastolic blood pressure were not significantly affected by the sodium dinitrophenol. Definite increases in venous pressure and in pulse rate occurred in ten of the thirteen cases studied. These increases showed much fluctuation. The concurrent increases in pulse rate and venous pressure explained the maintenance of normal blood pressure in spite of the marked peripheral vasodilation resulting from the dinitrophenol. Despite the variability in all observations, it was quite evident that, while no significant change occurred in blood pressure and in vital capacity, there were definite increases in pulse rate and in venous pressure.



# THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

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